

**An Examination of Service Provision for, and Staff
Experiences of, People with a Learning Disability who
Display Aggression and Violence**

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Declaration

I hereby declare that:

1. The thesis has been composed by myself and with the exception of the advice and support of those in the acknowledgement section the thesis is my own work;

2. Where I was part of a research team, I confirm that I made the major or a substantial contribution as is outlined below:

Study 1: I was the main researcher involved in the conception, planning and data analysis in this study. The other authors assisted with data collection and my psychology colleague made some contribution to writing up the paper.

Study 2: I was the main researcher for all aspects of this study. The second author had some input in relation to the planning of the study and organisation of the paper.

Study 3: I had the majority of input in relation to planning the study and data analysis. The first and second authors took part in the data collection and the paper was written jointly by the first author and myself.

Study 4: I was the main researcher for all aspects of this study. I had assistance with data collection from two psychology assistants, help from the service manager in relation to making the methodology of the study practical for her staff team and input from my psychology colleague in relation to planning the write-up of the papers.

Study 5: I was the main researcher for all aspects of this study. The nursing service manager assisted with the planning and data collection, the assistant helped with data collection and my psychology colleague had some input in relation to data analysis and writing up the study.

Study 6: I was the main researcher for all aspects of this study. My team colleagues helped to devise and deliver the staff presentation about the proposed service change which the study evaluated. My psychology colleague was involved in planning the write-up of the study and discussions of supporting literature.

3. The thesis has not been submitted in candidature for any other degree, postgraduate diploma or professional qualification.

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Abstract

The thesis aimed to establish a snapshot of service provision for people with a learning disability and to examine staff experiences of aggression in both community and specialist health services. Study 1 found differences in the professional composition of community learning disability teams within Scottish NHS trusts. Study 2 indicated that different professions have quite different work patterns within the same team, while study 3 illustrated that aggression was the most common reason for referral to one community clinical psychology service. Studies 4 and 5 established that a high percentage of both social care and health staff experienced aggression, mainly attempted or actual physical aggression. No clear relationship was found for the social care group between training and either the experience of aggression or confidence in managing it. Gender appeared to play a mediating role in relation to training, with trained women being significantly more likely to report anxiety in managing aggression than trained men. Gender differences also existed in relation to the experience of assault, with women being more likely to report assault. Study 5 found that staff qualification was also implicated, with qualified staff being at greater risk of experiencing aggression. The high levels of aggression were not, however, related to burn-out, as measured by absenteeism. This was thought to be due to aspects of the team climate and the strong, positive working relationships between staff acting as a 'stress buffer'. Study 6 indicated that both health and social care staff, saw advantages overall in moving from an inpatient model of care for those with severely challenging behaviour towards a more collaborative community outreach service.

Chapter One

1.1 Introduction

The following thesis will examine the role of different services in responding to challenging behaviour in people with a learning disability, with a particular emphasis on aggression and violence. The thesis will comprise of six studies. Study 1 will examine current health service provision for people with a learning disability in general, while study two will focus on the broad work patterns of a community learning disability team. The results of these studies will be placed in a historical context in relation to defining a learning disability and service provision.

Study 3 will examine the role of community based health professionals more closely in relation to behaviours that challenge, with particular emphasis on the role of clinical psychology. Study 4 will focus on community services and examine staff responses and training needs in relation to aggression and violence. Study 5 will focus on a specialist in-patient health service unit, in relation to staff experiences of aggression and violence and factors which may impact on this. Finally, study 6 will examine community and health staff views about proposed changes in service provision for clients with extreme challenging behaviour.

The thesis will begin with a general introductory chapter outlining the definition of a learning disability and which will aim to briefly place current models of service provision within an historical context.

1.2 Defining Learning Disability

The concept of learning disability is a social construction, the name and definition of which has changed over the years. These changes have partly depended on how the many issues relating to what we now know as a

'learning disability' were addressed and the nature of services provided in relation to what the perceived needs were at the time. While the concept of a learning disability, the terms used to describe the client group and the emphasis and organisation of services to this group of people has changed over the years, most of the more recent definitions of a learning disability share the same two major defining characteristics: significant intellectual impairment and significant impairment in social functioning.

A learning disability is currently commonly defined as:

- Significant subaverage intellectual functioning, with an IQ of approximately 70 or less
- Concurrent deficits or impairments in present adaptive functioning in at least two of the following: communication; self-care; home living; social/interpersonal skills; use of community resources; self-direction; functional academic skills; work; leisure; health and safety
- Onset before adulthood

(D.S.M. IV - American Psychiatric Association, 1995)

Around twenty people in every thousand people in the population will have a mild learning disability and require some support with daily living. Three to four in every thousand will have severe learning disabilities and will need frequent support with some aspect of daily living (Department of Health, 1995). While 'labelling' of a group of people can result in an associated stigma (Hastings et al., 1993), the identification and diagnosis of a particular client group can be crucial to highlight associated needs and promote targeted services and appropriate service development. By definition, people with a learning disability have a range of support needs. The nature of support provided to individuals with a learning disability and

the target for intervention has varied over the years. A brief outline of previous perspectives and definitions of learning disability is given below.

1.2.1 Defining Learning Disability: A Historical Perspective

In medieval times, service approaches to people with a learning disability were essentially pragmatic and financial in nature. Families would receive help via the courts or poor law administrators, mainly to provide for basic necessities required to promote independent living. Between medieval times and the early nineteenth century a distinction began to be made between what was then called 'Idiocy' and 'Lunacy'. Idiocy was defined as being congenital and irreversible, while lunacy was seen as being acquired and punctuated by 'lucid intervals' (Andrews, 1996; Neugebauer, 1996; Rushton, 1996).

During the late nineteenth century something closer to modern definitions of learning disability began to arise. The increasing demands of Victorian society for an educated workforce made the gap between the needs of 'idiots' and the rest of society more evident. The definition of 'idiocy', therefore, became predominantly based upon a person's ineducability. During this era, reasoning ability was viewed as a defining characteristic of humanity and this led to 'idiots' becoming viewed as less than fully human (Wright and Digby, 1996). This, combined with rise of social reformation led to an increase in the rates of admission to institutions. The medical profession became increasingly involved in service provision and 'idiocy' became conceptualised as an incurable organic disease.

Around this time, psychologists also began to develop the theory of unified intelligence and IQ tests. This created a 'scientific' method of classifying people as being 'mentally deficient' at a young age and placing them in

segregated institutions. The administrative definition of 'mental deficiency' was expanded to include 'idiocy', 'imbecility' and 'feeble-mindedness'. The aim of institutionalisation moved away from more positive ideas of training people for independence to the protection of society by the permanent segregation of 'mental defectives' (Jackson, 1996).

1.2.2 Learning Disability: The National Health Service and Community Care

Following the introduction of the welfare state, institutions became a part of the newly established National Health Service. Institutions came to be referred to as hospitals and the people in them as 'patients'. This, together with increasing movement towards equal civil rights led to a lessening of the view of people with a learning disability as a threat to society (Emerson, 1992). Along with these more positive attitudes towards people with a learning disability arose concerns that the institutional care provided may not be in the best interests of the people that they cared for. (Race, 1995; Mittler and Sinason, 1996).

The 1960s saw the exploration of alternative models of care. The White Paper, 'Better Services for the Mentally Handicapped' introduced a move to the development of more community-based services (DHSS, 1971). This move was heavily influenced by political ideas at the time, in particular, that of normalisation (Wolfensberger, 1972). This emphasised the equal rights of people with a learning disability and the need to promote their integration into local communities in situations of ordinary living (King's Fund, 1980; Tyne and O'Brien, 1981). Community care continues to be the predominant model for service provision for people with a learning disability in many countries, including Scotland. In

response to this move has come the continued closure of institutions, with a reduction from 6500 clients living in institutions in 1980 to approximately 2450 in 1998 (Scottish Executive, 2000), the development of multi-disciplinary community learning disability teams (Brown and Wistow, 1990) and the increasing involvement of primary health care teams in meeting the health care needs of clients with a learning disability in a community setting.

These changes in health service provision have also been influenced and evaluated by the work of Tyne and O'Brien (1981). These authors outline a number of criteria by which a service can be adjudged to be high quality. These 'five accomplishments' encompass the following:

- Choice: The service will ensure that the individual is supported to make adaptive and informed choices about their lives to the extent that they are able
- Community Presence: The service promotes the participation of the client in ordinary community activities and facilities
- Competence: The service develops the competence of the individual by promoting those skills and attributes that are valued and adaptive
- Respect: The service will promote the treatment of the individual in a respectful way by others by ensuring that a positive image of the client group is maintained wherever possible
- Relationships: The service will promote the development of the individuals' naturally occurring, positive relationships.

The complex and multiple needs of people with a learning disability, has however, meant that at times service provision has lagged behind the political and philosophical ideals. These needs range from physical health needs, with clients with a learning disability having greater health problems

than the general population (Department of Health, 1995; Thornton, 1997) to needs in relation to behavioural and psychiatric problems (Caine et al., 1998). As people with greater levels of health care need, who would have traditionally been looked after in a hospital setting, began moving into the community and under the responsibilities of primary health care teams, a debate began about who would be best placed to meet the needs of this patient group. Those identified have included psychiatry (Bernard and Bates, 1994), physicians in community practice (Miniahan et al., 1993) and GPs (Department of Health, 1995). However, reviewers (Ineichen and Russell, 1987), carers (Rodgers, 1992) and GPs themselves (Kerr et al., 1996), have been critical or ambivalent about the GP undertaking the lead role.

Specialist services have also been identified as having a central role in the health care provision of clients with a learning disability. McKenzie et al., (1999a) found that the majority of GPs felt specialist community learning disability teams had a more significant role in meeting the health needs of clients with a learning disability than themselves. Similarly, Kerr et al. (1996) found 82% of GPs found the support of a specialist community learning disability team useful, with 69% seeing the treatment of behavioural disorders as a specialists' responsibility.

The most recent Scottish Executive Review of learning disability services - 'The Same as You?', proposes partnership in practice agreements which are designed to integrate health and local authority services to successfully meet the needs of clients with a learning disability, predominantly in community settings (Scottish Executive, 2000).

1.2.3 Summary

The definition and labelling of, and service provision for, clients with a learning disability has changed markedly over the years. Despite this, a group of people remain for whom the support needs may range from very little professional support to intensive support to meet the complex physical, mental and behavioural needs of the client. As is outlined above, the service provision for clients has varied depending on where the emphasis has lain. This emphasis in turn has been shaped by the wider social context in which clients with a learning disability live. Thus services have served in turn an educational, segregating, medicalising and integrating role. Chapter two will now focus on providing a snapshot of specialist health service provision for clients with a learning disability in Scotland.

Chapter two

2.1 Study 1: An Overview of Current Service Provision to Clients with a Learning Disability.

The following study provides a snap-shot of service provision for clients with a learning disability in Scotland. The study focuses on Scotland wide service provision.

2.2. Study 1: Introduction

As noted above, services for people with a learning disability have changed markedly over time and particularly since the 1960s, with a rejection of what was perceived as a medical model of care in preference for a social model. Community learning disability teams were developed to support the implementation of community care policies (Brown & Wistow, 1990). The teams have continued to develop in response to ongoing political and strategic changes (Brown & Griffiths, 1990). The NHS Community Care Act (Department of Health, 1991) in particular, shifted the role of community learning disability teams away from service planning and development (Greig & Peck, 1998), requiring the teams to re-evaluate their function.

An additional factor which impacted on the role of the community learning disability team was the realisation, noted above, that individuals with a learning disability are likely to experience a greater number of health problems than the general population, and that these needs may not always be adequately met (Paxton & Taylor, 1998). It is estimated that approximately 24 people per thousand have a learning disability. Increased health needs include mental health problems, epilepsy, communication, visual and hearing problems, obesity, heart disease, orthopaedic and other problems with mobility (Department of Health, 1995).

One area in which specialist services continue to play a major role is in the assessment and treatment of challenging behaviour. Severely challenging behaviour is commonly defined as:

“Behaviour of such an intensity, frequency or duration that the physical safety of the person or others is placed in serious jeopardy, or behaviour which is likely to seriously limit use of, or deny access to, and use of ordinary community facilities.” (Emerson et al., 1988, p16).

The aim of specialist health services is to provide advice and support to care staff and clients to allow the person with a learning disability to remain within his or her home and mainstream services. Meeting the often multiple and complex needs of people with a learning disability has implications for the responsible services, both in terms of financial and professional resources required. This has led to an examination of the many factors that impact on the goal of equitable resource allocation.

The most obvious of these is the greater prevalence of people with a learning disability in a given area (Mansell, 1998). One of the main sources of variation is the greater number of individuals with a learning disability living near sites of learning disability institutions (Russell & Stanley, 1996). In addition, there has been a pattern of individuals with a learning disability being located outwith their area of origin. Resource allocation does not always allow for these factors (Mansell, 1998).

The many philosophical, political and organisational changes that have occurred has led to a recent interest in both the remit and composition of community learning disability teams in England and Wales (Greig & Peck, 1997; Cooper & Bailey, 1998). While the Scottish Executive (2000) carried out a review of learning disability services in Scotland, a similar

examination of the specific role of the learning disability team was not made.

Study 1, therefore, aimed to survey all National Health Service Trusts in Scotland which provided a specialist service to individuals with a learning disability, to provide a picture of the current professional composition of the services and the implications this may have for service provision. A further aim was to provide a national context within which to place the results of studies 2- 6. The study was carried out prior to the publication of the Scottish Executive Review (2000).

2.3 Study 1: Method

All National Health Service trusts in Scotland were contacted by telephone. The names, addresses and contact numbers of the trusts were obtained from The Handbook of Community Nursing (1996) which listed all Scottish NHS Trusts. The trusts were asked if they provided a specialist service to individuals with a learning disability. The thirteen trusts which did so were asked to provide a contact name and number of the service administrator or manager. These individuals were contacted and the nature of the study was explained to them. All of the trusts contacted agreed to participate (100%) and provided the following information:

- The population size covered by their service
- The professional composition of their adult community learning disability service and whole time equivalence of sessions provided.

This included both qualified and unqualified staff and posts which were currently unfilled, but excluded staff attached to additional support teams or challenging behaviour teams as these often provided a regional service.

All but two areas were able to provide this information immediately over the telephone. One area telephoned back the next day with the information and one subsequently provided written information, giving a 100% response rate.

2.4 Study 1: Results

The results refer only to those trusts in Scotland who provide a specialist community learning disability service (n=13) and reflect adult services.

The average population served by these trusts was found to be 341384 with a minimum of 100,000 and a maximum of 900,000. Table 1 illustrates the average number and range of whole time equivalent staff in each profession providing a community learning disability service per 100,000.

Table 1: Average number and range of whole time equivalent staff in each profession providing a community learning disability service per 100,000.

Profession	Average WTE/100000 population	Minimum	Maximum
Psychiatry	0.5	0	0.9
Nursing	4.2	2	8.1
Clinical Psychology	1.3	0.5	3
Speech and Language Therapy	0.6	0.1	2.5
Occupational Therapy	0.5	0	2.3
Physiotherapy	0.8	0	1.8
Dietetics	0.2	0	0.4

Table 2 illustrates the number of Scottish trusts which have no input to community learning disability teams for each profession

Table 2: The number of Scottish trusts which have no input to community learning disability teams for each profession

Profession	No. of trusts without this profession
Psychiatry	2
Nursing	0
Clinical Psychology	0
Speech and Language Therapy	0
Occupational Therapy	3
Physiotherapy	1
Dietetics	5

2.5 Study 1: Discussion

Study 1 found disparity between Scottish trusts in the professions represented in the community learning disability teams. A number of social, philosophical and political changes have impacted on the role and remit of the team as outlined above. In addition, the changing emphasis on particular aspects of the service the teams provide may have resulted in developments in particular professional groups. One example is the development of 'specialist' roles in dealing with challenging behaviour resulting in corresponding changes in emphasis in the team with clinical psychology, psychiatry and nursing playing key roles (Greig & Peck, 1997). Similarly, the increasing recognition of unmet health needs in the learning disabled population and the view of some GPs that meeting those needs is the remit of the community learning disability team (McKenzie et al., 1999a), suggests a further influence on the role of the team.

The differences in the professional composition of community learning disability teams per 100000 population across the Scottish trusts may reflect this dynamic process with trusts responding to local needs in their area. Some findings were, however, consistent across all trusts. The professional group with the largest representation across all trusts was

community nursing, followed by clinical psychology. A similar result was found for learning disability services in both hospital and community services in England and Wales (Cooper & Bailey, 1998). There were no Scottish trusts which did not have some representation from these two professions in the service. This service profile may reflect the broad remit of these professions and their historical role in the provision of care to people with a learning disability. The only other profession represented in all trusts was speech and language therapy. This may reflect the fact that communication difficulties can present a significant barrier to ordinary living for many people with a learning disability (Department of Health, 1995).

The remaining professions were not represented at all in some Scottish trusts. Some generic services, particularly dietetics could be accessed via the client's GP. Such services could not, however, be provided in the context of a multi-disciplinary team or by specialists in the field of learning disabilities. Research suggests that some GPs may have limited knowledge about learning disabilities and may therefore lack confidence in providing for client's health needs (McKenzie et al., 1999a). This may also be true for other generic services. There is a recognition that standard psychiatric services may not always be able to meet the complex needs of people with a learning disability (Royal College of Psychiatrists, 1997). Given the high incidence of associated mental illness within the learning disabled population it is perhaps surprising that two trusts reported having no psychiatric input to their community learning disability teams.

In general, there would appear to be a lack of consistency across Scottish trusts in the employment of professionals, with 38% failing to have a specialist dietetic service and 23% failing to have occupational therapy

services. In addition, one trust had no physiotherapy sessions allocated to the team. This is despite evidence that individuals with a learning disability have increased needs in relation to diet, nutrition and mobility problems (Department of Health, 1995). As noted above, this may reflect differing needs and priorities of the local population in any given area, a similar mixed professional profile in response to local needs having been found for community mental health teams (Onyett et al., 1994). It is however, unlikely, given the acknowledged complex needs of people with learning disabilities, that any local population did not have needs which required specialist services. The assumption that such services can be accessed via generic services is not always supported (Thornton, 1996).

The disparity found between the Scottish trusts suggests a lack of equity across these services and points to the need for a National strategy. The Scottish Executive Review has yet to directly address these issues. One question is whether community learning disability teams should continue to exist in their current format. There is an increasing emphasis on the need for joint working across health, education, social work, housing and employment which is likely to further impact on the role of community learning disability services.

Methodological limitations

The main limitation of study 1 is that it can only provide a snapshot of service provision in an area that is subject to frequent changes. It is possible that shortly after the study took place additional resources were allocated to, or removed from, certain professions, which would change the service picture completely. A second limitation was that the study did not take into account the actual number of clients with a learning disability who lived within each area and their specific needs. Previous research has

found that there tends to be a greater number of individuals with a learning disability living near sites of learning disability institutions (Russell & Stanley, 1996). It was outwith the scope of study 1 to examine in detail the population profile of each area studied, rather the study aimed to provide a broad picture of service provision across Scotland. A third limitation of the study relates to the fact that the reliability of the results are only as reliable as the information provided by the respondents. An attempt was made to minimise this factor by ensuring that information was obtained from service managers who had the responsibility for the learning disability service. Indeed, most respondents were able to easily supply this information, suggesting that it was up to date and accessible. Finally, the study did not include staff who were employed in specialist challenging behaviour and additional support teams. The reason for this was that these services were often organised across a number of trusts within large regions of Scotland. In addition, staff in these teams were also often employed for sessions as part of community learning disability teams. The exclusion of staff in specialist teams meant that it was possible to obtain a more accurate picture of general community health services for people with a learning disability in relation to each trust-wide area. The limitation is, of course, that staff in specialist teams were excluded.

In conclusion, study 1 aimed to provide a broad service context within which to place the results of the remaining studies. The results suggest patchy service provision, with the absence of certain professionals within certain trusts, but consistent representation from nursing and clinical psychology. Study 2 aimed to provide a snapshot of the broad activity patterns of one community learning disability team before examining the role of team members in relation to challenging behaviour.

Chapter three

3.1 Study 2: The Activity Patterns of a Community Learning

Disability Team - Introduction

One major outcome of the move towards the provision of residential services in the community was the setting up of community-based teams as a part of the new supporting infrastructure. It was recognised within these service developments that one single profession or organisation working in isolation would be unable to meet all of the needs of clients with a learning disability and an emphasis was placed on joint working (Macadam & Rodgers, 1997).

The need for joint working has been reflected in a number of Government policy documents, culminating in 'Community Care: A Joint Future' (Scottish Executive, 2001) which brings together health and social work professions within the one service. In 1989, 'Caring for People' (Department of Health) prompted services to work together effectively, respect and be aware of the contribution of others, to cross-refer and to collaborate in sharing information, advice and resources.

Community learning disability teams were seen as an important way to promote joint working and collaboration. They were seen as a way of bringing together a number of different professionals who would take on the following roles:

- Provision of direct clinical services
- Service development
- Liaison and co-ordination (Brown, 1990).

As the services developed, however, it became clear that simply organising different professionals within a team structure did not guarantee team work and collaboration. A body of literature began to grow, looking at how these teams operated in their everyday work. Models of staff performance suggested that there are many interacting factors which contribute to effective working practices. Some of these factors are outlined below.

Type of Group Interaction

Early work by Fiedler (1967) identified three main types of group based on the nature of their interaction:

- Interacting Groups: Here group members are interdependent and need to collaborate to achieve the group task.
- Co-acting Groups: Here group members work together on a common task but do so relatively independently.
- Counteracting Groups: Here group members work together to reconcile conflicting demands.

The nature of the group will greatly influence the extent to which differing professional ideologies, attitudes and values will impact on the group.

Interacting and counteracting groups are likely to be influenced to a greater extent by these factors because of the intensity of interaction and collaboration that they require. It would be predicted that community learning disability team members would be expected to move in and out of each type of group typology as the nature of the demands on them differ. Some goals, e.g. developing a care programme for clients, are likely to depend on co-operation from all group members, while other clients may only require input from one or two professionals leading to a co-acting group. At other times the group may pull together to generate solutions

to conflicting demands e.g. providing a certain standard of service within limited resources. It would be expected that the effective working of the team would relate to the extent that it can be flexible in adapting its interactional style to meet the needs of the situation.

Group cohesiveness

Another important factor influencing the collaboration of groups is cohesiveness. Cohesiveness is defined as a "characteristic of the group in which forces acting on members to remain in the group are greater than the total forces acting on them to leave it" (Davis, 1969, p47). Shaw (1976) further notes how group members, who are attracted to the group, work harder to achieve its goals. Cohesiveness can be influenced by a number of factors, including the stability of the team and its attractiveness to group members. Attractiveness, in turn has shown to be influenced by its composition, the extent to which individuals differ in respect of status, values and attitudes (Hackman, 1980) and the extent to which its members are dependent on the group to achieve its goals (Fincham & Rhodes, 1988).

Each profession or organisation may hold its own ideology, set of attitudes and values. It is also likely to have a distinctive professional or service culture within which it operates, which has been developed over time and is sustained by training and practice (Macadam & Rodgers, 1997). All of these factors can impact on cohesiveness. Conflict can also arise in relation to the role of each professional, particularly if skills overlap or are not recognised (Ovrevit, 1986). The environment and context within which the service operates may also differ markedly from those of other service providers and these differences need to be taken into account (Cullen, 2000).

There are, therefore, a number of formal and informal aspects of the service e.g. policies, peer pressure, and of the individual e.g. attributions (Hastings & Remington, 1994) which can impact on service quality.

There have been a number of studies examining the role of some of these factors in residential services (Emerson et al., 2000) and in nursing staff (Hastings et al., 1995). Recent work by Emerson et al. (2000) which examined the treatment and management of challenging behaviour in community residential settings found that limited leadership and a lack of commitment, organisational inefficiency as well as lack of knowledge of staff, including health staff, were some of the main factors which led to ineffective service provision. There is nothing to suggest that these factors would not be equally as important within community learning disability teams. There has, however, been little examination of the working practices of community learning disability teams.

Many of the studies which do exist, have either focused on the therapeutic approaches used by individual team members in the course of their clinical work or with consumer satisfaction issues (e.g. Lowe, 1992; Dagnan et al., 1993; Dagnan et al., 1994). In particular, there has been little research into how teams operate as cohesive working groups and the factors which may influence this.

Most teams, as outlined above, employ a range of professionals each with his or her own individual training, clinical goals and remit. Individuals who had previously worked as relatively independent professionals have found themselves expected to work in partnership with others as part of a multi-disciplinary team. Research has established that organisational change can be difficult to manage as it often relies on changing the

attitudes and behaviour of individuals (New & Couillard, 1981) and that resistance to change can clearly impact on co-operative working and cohesiveness.

Working in a community learning disability service can involve varying degrees of liaising with other professionals, carers and clients, all of which can divide team members' commitment, both in terms of time and other resources. The differing working practices of the professions working within a team may also produce effects on group cohesiveness.

Staff stress

Another important factor is the extent to which team members experience stress and burn-out. A more detailed outline of models of stress in relation to staff working in learning disability services is given in chapter seven. A brief overview is, however, given below.

A large number of studies have found high levels of staff stress, burn-out and job-turnover in staff working in learning disability services, although most of this research has involved residential staff (Bromley & Emerson, 1995; Sharrad, 1992; Allan et al., 1990). Some of the contributing factors which have been highlighted include the high amount of time spent in direct and intense interactions with clients with a learning disability (Caton et al., 1988), characteristics of the client group e.g. challenging behaviour (Rose, 1995), the daily grind of caring (Bromley & Emerson, 1995) and slow progress (Carr et al., 1999). Staff who work directly with clients with a learning disability are also at an increased risk of experiencing aggression (McKenzie et al., 2000a; Harris, 1993). This would suggest that the nature of contact that team members have with clients is an important factor.

Peer and managerial support have been identified as potential mediators which may reduce staff stress levels and burn-out (Rose & Schelewa-Davis, 1997). However, it is not always easy to identify the extent to which team members work together. Joint working practices may not always be reflected in the recording systems used within the NHS which are often based on direct patient contact data (e.g. Hyslop, 1995) which is unlikely to be the most representative way of measuring the work performance of professionals in the field of learning disability. This method is also likely to miss indirect clinical work i.e. where much of the clinical work may be with other direct carers as opposed to directly with the clients themselves.

Summary and aims of study two

Effective team-work is known to result in a range of benefits for clients, not least providing a framework for co-ordinated service planning and development (McGrath, 1993). It is also recognised that a shared sense of direction and agreement about responsibilities within a team is a sign of good practice (Department of Health, 1998). The working relationships between team members are, therefore, crucial to effective service provision. Study 2, therefore aims to look at joint working by examining how much members of a learning disability team actually work together on client cases and to evaluate to what extent this work is direct or indirect.

3.2 Study 2: Method

The team in question is a multi-disciplinary community learning disability team based in a rural area of Scotland covering an overall population of just over 100,000. The following professions are represented in the team (whole time equivalent staffing in brackets):

Clinical Psychology	(0.8)
Psychiatry	(0.7)
Nursing	(3.0)
Speech Therapy	(0.5)
Physiotherapy	(0.6)
Music Therapy	(0.7)

Team members kept records of their contacts with clients over a one year period in the course of their clinical work for the purposes of this study. Contacts were recorded on a simple sheet designed and agreed with staff members for the purposes of the study. The sheet included the name and profession of the staff member and the nature of each individual contact. Contacts were recorded as either direct (i.e. face to face with the client in either a group or individual setting) or indirect (i.e. via a third party). Contacts were also distinguished as being either lone (i.e. the professional involved only) or joint (i.e. with another team member). The duration of the contact was disregarded for the purposes of the study, with any contact that lasted longer than thirty minutes being counted as one contact.

Results were presented for each profession as a percentage of total contacts. This was to avoid direct comparisons of actual number of contacts which could be seen as reflecting badly on some professions and which could cause conflict amongst team members.

3.3. Study 2: Results

Overall, 66% of the team's contacts were direct and 34% were indirect.

The percentage of direct and indirect contacts for different professional groups are recorded below in Table 3.

Table 3: Percentage of direct and indirect contacts for each professional group

Profession	Percentage of Direct Contacts	Percentage of Indirect Contacts
Clinical psychology	35	65
Psychiatry	56	44
Nursing	60	40
Speech Therapy	56	44
Physiotherapy	92	8
Music Therapy	99	1

Table 4 illustrates the percentage of contacts that were either lone or joint for each professional group.

Table 4: The percentage of contacts that were either lone or joint for each professional group

Profession	Percentage of lone contacts	Percentage of joint contacts
Clinical Psychology	52	48
Psychiatry	42	58
Nursing	71	29
Speech Therapy	100	0
Physiotherapy	93	7
Music therapy	85	15

3.4 Study 2: Discussion

A group of professionals working within the same organisation does not constitute a team (Ovreveit, 1986). Just because people are placed together it does not mean that they will work together. Effective team

work takes time, effort and commitment from all those involved. The aim of establishing community learning disability services, which operated as a team, was to provide the person with a learning disability with a higher quality of service (Department of Health, 1989). Study 2 found that, on average, the team worked more in direct contact with clients and as lone professionals as opposed to with other team members. This suggests that, as a whole, the team was acting as a co-acting group (Fiedler, 1967).

Variation in how much individual team members worked together was also found. Speech therapy worked exclusively on its own, with physiotherapy and music therapy also working relatively independently of other team members. This may be reflective of the independent nature of the clinical work being performed, i.e. work that does not require to be a part of other treatment approaches

By contrast, clinical psychology and psychiatry worked to a much greater degree in conjunction with other team members. This may both reflect the more consultancy-based approaches used by these professional groups, but also the more holistic nature of the therapeutic interventions employed. (McBrien & Candy, 1998). The types of referrals received by professions may also have influenced the extent to which team members worked together. In relation to specific areas of work there may be "teams within the team". For example, the majority of work relating to challenging behaviour is undertaken jointly by clinical psychology, psychiatry and nursing and each may have a different role in a co-ordinated treatment plan for an individual client.

While these different working patterns may reflect flexible responses to service needs they also suggest that some team members may be benefiting more from the positive effects of team working and peer

support. Rose (1993) found that isolation from fellow workers can be a contributor to stress. Conversely, however, other staff members can be seen as significant sources of stress, particularly if the team is failing to act cohesively overall (Rose et al., 1998).

A second potential contributing factor to stress is the extent to which professionals spend time working directly with clients. Study 2 found that there was quite wide variation in the extent to which direct work occurred for individual team members. Both the physiotherapist and music therapist spent almost all of their time in direct contact with clients. In contrast, clinical psychology spent least contact time with clients indicating a greater degree of work through other direct carers. This may be a reflection of the differing nature of the work of each professional group. Clinical psychology operates with a greater degree of consultancy work, and treatment programmes are more likely to be carried out by third parties (McBrien & Candy, 1998).

The results of study 2 indicate that differing working patterns exist between the individual professions working within the same community learning disability team. This raises the question of whether direct contact data is the best way of recording work performance in learning disability teams. For professionals who spend most of their time directly treating clients it may be a fair reflection of their work performance. For those whose work is more indirect or consultancy based, however, the validity and reliability of such data must be questioned.

In addition, such data fails to indicate what proportion of each individual's work is actually client related. Activities such as training and professional meetings, which may be a valid and efficient use of time

and resources, will not be recognised. The differing working practices of professions may not be adequately demonstrated in the recording of contact data. Factors such as the length of time a contact took or the quality of the work carried out is unlikely to be reflected. Often time spent in developing collaborative working is not seen as a valid use of the professionals' time either by managers or the professionals themselves (Macadam & Rodgers, 1997). Such time may, therefore, not be recorded.

One important criterion for models of successful staff performance is that there is a method for accurately measuring and monitoring that performance (La Vigna et al., 1994; Reid et al., 1989). There are a number of criteria by which a service can be judged as successful. It may be that the adoption of an approach such as that advocated by Maxwell (1984) which outlines six dimensions - relevance (appropriateness), equity, accessibility, acceptability, effectiveness and efficiency - would provide a more useful framework for evaluating the performance of a community learning disability service as a whole. An example of this approach as applied to a community learning disability team is given in McKenzie et al. (1999d).

In conclusion, study 2 showed that there is clearly some variation in the way different professionals operate as a part of the community team, and suggests that this may largely relate to the role each team member plays. In addition, the differing work patterns may also have an impact on the stress experienced by staff members. One factor that has been suggested as a buffer to the stress which can potentially arise from working in learning disability services is that of peer support (Rose & Schelewa-Davis, 1997). It may be that such support is more effective when staff teams work closely together and collaborate in relation to

generating interventions for clients. Some professions who work alone for most of the time may not benefit as much from this positive factor.

Research has also shown that the extent to which staff are in direct contact with clients can also impact on stress. This can be as a result of high intensity interactions (Caton et al., 1988). In addition, staff who are in contact with clients with a learning disability have an increased likelihood of being the victim of aggression (McKenzie et al., 2000a; Harris, 1993). Study 5 examines the relationship between assault and staff stress in more detail.

Methodological limitations

A major methodological limitation of study 2 is that the results only relate to the functioning of one particular team covering a specific area and population. Further work would be required to see if the findings can be generalised to teams in other areas or with a different professional composition. The nature of work in the field of learning disabilities is also constantly changing and developing and this may also produce variations in styles of working. Secondly, contact data provides only very limited information which may not reflect the quality of relationships within the team. Individuals, who appear from this data to work independently, may work quite closely and cohesively in ways that may not be reflected in these figures e.g. the provision of joint training, service development.

A third limitation again relates to the reliability of the information obtained. The results may simply reflect the fact that some professions were more diligent than others in recording their contacts. It was hoped that this factor was minimised by the fact that all team members were involved in discussions about, and were committed to, collecting the team

data. In addition, the recording form was very simple and required little additional time and effort to complete. It was also hoped that reporting data as percentages of total contacts rather than actual number of contacts would lead to reliable recording as it removed staff concern that they would be judged to have lower contact data relative to other professionals. However, the potential unreliability of the results cannot be completely discounted .

In summary, study 2 suggests that differing work patterns exist for members of one community learning disability team. Study 3 examines in greater detail the role that community learning disability services, and in particular clinical psychology, play in responding to challenging behaviour.

Chapter four

4.1 Study 3: The Role of Clinical Psychology in Managing

Challenging Behaviour - Introduction

Study 1 found that composition of health service community learning disability teams differed across Scotland, while study 2 highlighted differences in working practices between staff members working within the same team. It was suggested that both of these factors can impact on the way that services are provided. The assessment and management of challenging behaviour is commonly seen as the remit of the specialist learning disability professional (Kerr et al., 1996). However, the very definition of the term, the range of behaviours it encompasses and the many factors associated with it has led to the development of a range of service options for its management.

Following a brief overview of some of the relevant factors in relation to challenging behaviour, study 3 will examine the role of clinical psychology, working as part of a community learning disability team, particularly in relation to service provision to clients with challenging behaviour. The section below highlights some of these general factors, before concentrating on one particular form of behaviour that challenges: aggression.

4.1.1 Challenging Behaviour

A wide range of behaviours are considered to be challenging, ranging from aggressive and destructive behaviours through to passivity and withdrawal. Behaviour can also be challenging for a variety of reasons, which may reflect features of individuals and environments. Carers and families supporting individuals with a learning disability in the community

have been found to perceive a greater number of behaviours as severely challenging as compared to hospital staff (Lowe & Felce, 1995).

As was outlined above severely challenging behaviour has been defined as: “Behaviour of such an intensity, frequency or duration that the physical safety of the person or others is placed in serious jeopardy, or behaviour which is likely to seriously limit use of, or deny access to, and use of ordinary community facilities.” (Emerson et al., 1988, p16).

The term ‘challenging behaviour’ arose in attempt to place the emphasis on the responsibility of the service to meet the needs of the client, rather than that the difficulty was intrinsic to the person with a learning disability (Emerson, 1995). Despite this, recent research suggests that, while health staff are likely to define challenging behaviour in terms of its impact on the service, social care staff are more likely to see it in terms of a particular behavioural topography (McKenzie et al., 1999b).

Emerson (1998) outlined three important aspects of how challenging behaviour is defined:

- Challenging behaviours are defined by their impact and, as a result, their causes and topography will vary.
- Challenging behaviour is a social construction, i.e. what is defined as challenging may vary between settings and cultures.
- Challenging behaviours have wide-ranging personal and social consequences. This may be for the client, family, staff, carers and others.

As a result of the definitional issues outlined above, the reported prevalence rates for challenging behaviour can be quite varied and can include behaviours ranging from non-compliance, teeth grinding and

scratching to theft, inappropriate sexual behaviour and aggression (Emerson, 1998). Aggression towards self, others or property tends to be the most commonly reported form of challenging behaviour (Borthwick-Duffy, 1994; Emerson, 1998). Emerson (1998) reports that between 10% and 15% of people supported by learning disability services display behaviours that present serious management problems. He also identifies factors that are related to the likelihood of a higher prevalence and multiple forms of challenging behaviour. These are:

- Being male
- Being aged between 15-35
- Having a severe learning disability
- Having additional sensory impairments
- Having particular syndromes e.g. autism

4.1.2 The Role of Community Learning Disability Teams in Responding to Challenging Behaviour

Clinical psychologists have traditionally offered a service to people with learning disabilities both in institutional settings and as part of community learning disability teams. The role of the clinical psychologist in learning disability services has had to respond to a number of philosophical, political and social changes which have impacted on the way such services are organised and delivered as outlined above (Greig & Peck, 1998). One of the main areas in which community learning disability teams continue to play a key role, however, is in the assessment and treatment of challenging behaviour.

While the general public have been found to be unclear about the role and area of competence of clinical psychologists in some specialities

(Wollersheim & Walsh, 1993), clinical psychologists working in learning disability services have traditionally been perceived as playing a key role in the assessment and treatment of challenging behaviour. Such behaviour can often be long-standing in nature and can be sensitive to changes in the environment, staffing levels and staff approaches (Hastings & Remington, 1994). Challenging behaviour can also have different and multiple causes and Hastings and Remington (1994) note that a behavioural assessment based on psychological principles is essential to the development of appropriate intervention strategies. The training and experience of clinical psychologists have ensured that they have a major contribution to make in respect of challenging behaviour. The aim of community learning disability services is to provide support to allow the individual with a learning disability to remain within main stream services. As more individuals with complex needs and behaviours which challenge are discharged from hospital to community settings the demands on care staff (Hill & Bruininks, 1984) and subsequently on clinical psychologists increase.

Study 1 indicated that while the Trusts in Scotland differ in terms of the professional composition of their community learning disability teams, clinical psychology is one of only three professions represented in all of the Teams. In addition, study 2 found that different professions within the team have been found to operate in differing ways, with clinical psychology tending to work in conjunction with other professions and to adopt a more consultancy-based approach. Study 3 will examine the impact of challenging behaviour referrals on the clinical psychology profession. The present study therefore aims to examine the number and nature of challenging behaviour referrals to a clinical psychology learning disabilities service.

4.2 Study 3: Method

The service in question was based in a rural part of Scotland and served a population of approximately 168,000. The clinical psychology post was for eight sessions and covered two multi-disciplinary community learning disability teams. The service had an open referral system i.e. referrals are accepted from any source. All of the referrals made to the clinical psychologist over a fifteen month period were coded by an independent rater in respect of reason for referral. If a client had been referred for more than one reason, these referrals were coded separately. Those which were identified as relating to challenging behaviour were further coded in respect of the following:

- a. Specific reason for referral
- b. Source of referral
- c. Length of input- both in terms of direct contacts with the client and indirect contact with carers and families. A contact was defined as a period of time of 30 minutes or more.
- d. Re-referral for the same problem within the fifteen month period
- e. Whether clients had previously received input from specialist services e.g. challenging behaviour unit, and if they were subsequently referred on to such a service.

4.3. Study 3: Results

The clinical psychology service received 132 new referrals over a fifteen month period. Of these 89 (67%) were identified as being in relation to challenging behaviour. Of the 89 individuals referred 43 (48%) had two or more different types of challenging behaviour e.g. physical aggression and exposure, giving a total number of 154. Thirty-one of these individuals already received input from other team members (community nursing =23, psychiatry = 4, speech and language therapy = 4) in relation to the

challenging behaviour. The remaining referrals, not identified as relating to challenging behaviour were for intellectual assessments, counselling and educational input.

Type of Challenging Behaviour Referral

Table 5 illustrates the number of each type of challenging behaviour for which referrals were received.

Table 5: Number of each type of challenging behaviour referred to clinical psychology over a fifteen month period.

Type of Referral	Number	Percentage of total challenging behaviour referrals (n=154)
Verbal Aggression	36	23
Physical Aggression towards other	34	22
Physical Aggression towards property	20	13
Passivity/withdrawal	4	3
Sexually inappropriate behaviour towards children	2	1
Sexually inappropriate behaviour towards adults	7	5
Sexually inappropriate behaviour- other	6	4
Self-injurious behaviour	8	5
Anti-social behaviour	29	19
Theft	2	1
Alcohol/drug abuse	2	1
Ritualistic/obsessive	4	3

As can be seen from table 5 the most frequently occurring type of challenging behaviour indicated by the referrer was in relation to verbal

aggression, with both physical aggression to others and property also occurring frequently. The next highest category related to anti-social behaviour. This included smearing, spitting, vomiting and soiling. Another significant category was for sexually inappropriate behaviours with 15 separate references to this. This ranged from rape and sexual abuse of children to masturbation in public.

Source of Referral

Table 6 illustrates the number of challenging behaviour referrals made by each referral source. Independent referrals relate to those made by the client him or herself.

Table 6: Number of challenging behaviour referrals made by each referral source.

Source of referral	Number	Percentage of individual challenging behaviour referrals (n=89)
Social work	37	42
Community nursing	15	17
Residential	15	17
Psychiatry	14	16
General Practitioner	4	4
Independent	2	2
Occupational therapy	1	1
Clinical psychology	1	1
(Other trust)		

As can be seen from Table 6 the majority of referrals came from social work, with the next largest source being from other health professionals within the team. Only two of the referrals were made by the client themselves.

Re-referrals

Overall only 17% of referrals for challenging behaviour were re-referred within the fifteen month period of the study. Table 7 illustrates the number and percentage of individuals who were re-referred for the same reason within a fifteen month period broken down by type of challenging behaviour.

Table 7: Number and percentage of individuals re-referred for the same type of challenging behaviour within a fifteen month period in relation to total referrals for each type.

Type of Referral	Number	Percentage
Verbal Aggression	5	14
Physical Aggression towards other	5	15
Physical Aggression towards property	1	5
Passivity/withdrawal	0	0
Sexually inappropriate behaviour towards children	0	0
Sexually inappropriate behaviour towards adults	2	29
Sexually inappropriate behaviour other	2	33
Self-injurious behaviour	1	12
Anti-social behaviour	3	10
Theft	0	0
Alcohol/drug abuse	2	100
Ritualistic/obsessive	0	0

NB Four individuals were re-referred for both physical and verbal aggression. Table 7 indicates that the most common reasons for re-referral were for alcohol/drug use (although this related to only one client), sexually inappropriate behaviour and physical and verbal aggression.

Length of input

The mean number of direct contacts with clients for all types of challenging behaviour was 2.3, while the mean number of indirect contacts was 3.2. Overall the mean contact numbers for both direct and indirect contacts was found to be 5.4. Those individuals who were referred for more than one type of challenging behaviour (43) had a higher mean number of total contacts (8.4) as compared with individuals who were referred for only one type of challenging behaviour. The mean number of total contacts for the latter group was 2.6.

Input from other services

Eighteen individuals (20%) were known to have previously received input from either a regional challenging behaviour unit or challenging behaviour team. Of the 89 referrals, 2 were referred on to general adult services when it was found on assessment that they did not have a learning disability. Two clients were subsequently referred on to the challenging behaviour unit, following sexual offences and for an assessment of mental health.

4.4. Study 3: Discussion

The results of the present study indicate that for the clinical psychology service in question two thirds of referrals are as a result of challenging behaviour. The move to community care appears to have resulted in the requirement for care staff who may be unqualified and untrained to support individuals with challenging behaviour (Hill & Bruininks 1984). Research has found that carers supporting individuals with learning disabilities in family homes and community houses rate more behaviours as presenting a severe challenge than carers in hospital (Lowe & Felce, 1995)

Carers may respond to this by referring to clinical psychology services for support.

Most of the referrals were found to come from social work. This is likely to be a result of NHS Community Care Act (Department of Health, 1991) which largely gave the responsibility for co-ordinating and reviewing client care to local authority care managers. To fulfil this function social workers liaise with many of the organisations which provide support to individuals with a learning disability and are therefore well placed to identify difficulties early on and access health services for support. Only four percent of referrals were received from GPs. This may reflect the on-going confusion about the role of community learning disability services in providing for the health care needs of people with learning disabilities (Kerr et al., 1996), but may also be a consequence of carers reporting difficulties to their care manager rather than the GP. Only two percent of individuals referred themselves to the service. This is consistent with findings that individuals with a learning disability are often referred to health services by others and may not be aware of the reason for the referral (Murray et al., 1998).

The greatest number of referrals related to aggression, both physical and verbal. There has been a great deal of research indicating that staff and carer assault is associated with staff burn-out and turn-over (Bromley & Emerson, 1995). It is therefore unsurprising that a high number of referrals were received for this difficulty. A large number of referrals were also received for some form of sexually inappropriate behaviour, with sixty percent of these types of referral being for the sexual assault of adults and children. While previous research has indicated that carers may not always intervene effectively in situations where the client or others are at

risk (Hastings et al., 1995) and that sexual assault can go unreported (Lyall et al., 1995) nearly ten percent of challenging behaviour referrals in the current study related to sexually inappropriate behaviour.

Overall, seventeen clients were referred back to the service within a fifteen month period. Four of these were as a result of a group for individuals who had committed sexual offences resuming after an agreed break. The next largest group was for aggression, perhaps again indicating the stress that such behaviour causes for staff. By its very nature, challenging behaviour arises when some aspect of a service provision does not meet the needs of the individual. Its occurrence can be related to factors such as environmental change, staff attitudes, knowledge and approaches (Hastings & Remington, 1994). In addition, high levels of staff turn-over has been found in care staff supporting people with a learning disability (Bromley & Emerson, 1995). The combination of these two factors may result in psychological approaches agreed with, and implemented by, staff breaking down due to staff changes. This may lead to the re-emergence of the challenging behaviour and subsequent re-referral to clinical psychology.

Overall, nearly 83% of referrals were not re-referred during a fifteen month period, and only two individuals were referred on either by clinical psychology or another individual to other services. This may give some indication of the effectiveness of clinical psychology input. An alternative explanation, however, is that the individuals improved because of a reason independent of psychology input or that staff attitudes towards the behaviour changed so that they no longer perceived it as challenging. It should also be noted that thirty-one of the individuals referred also received input from other professionals within the community learning

disability team, primarily community nursing, in relation to their challenging behaviour. As noted the causes of such behaviour can be complex and multiple and may result from mental health problems or serve a communication function (Thurman, 1997) Under such circumstances a multi-disciplinary approach may be required to generate the most effective intervention, rather than the input of one profession alone.

Overall, the mean number of contacts in response to challenging behaviour referrals was not particularly high, although the results indicated that the clinical psychologist had more contact time working indirectly with staff than engaging in direct client work. A similar result was found in relation to the overall role of clinical psychology within a community learning disability team in study 2. Those individuals who were referred for more than one type of challenging behaviour did, however, receive more overall contacts, perhaps reflecting the more complex nature of their behaviour. Such individuals were not, however, found to be any more likely to be re-referred than those who displayed only one form of challenging behaviour. In addition, only two individuals were subsequently referred on to regional challenging behaviour services. This would suggest that the input of clinical psychologists in conjunction with other professionals within the community learning disability team is largely achieving the aim of maintaining individuals with a learning disability within mainstream services.

Methodological limitations

The study does have limitations in that it relates only to one particular service in one area. In addition, while the service was examined over a relatively long period i.e. fifteen months, this can only represent a snapshot of the service. The study may not, therefore, be representative of other

services and geographical areas and may not even reflect the nature of the service examined at a different point in time.

In summary , the present study would indicate that the clinical psychology service studied had a clear role to play in the assessment and treatment of challenging behaviour and that such referrals constituted a large proportion of the work-load. Referrals were most likely to come from social workers and to be for verbal and physical aggression. Referrals for more than one type of challenging behaviour required more contacts overall, but were no more likely to be re-referred. Re- referral rates were low but were found to occur most often for aggression.

Given that the results of study 3 indicated that aggression was the most common reason for referral to clinical psychology services operating as part of a community learning disability team, studies 4 and 5 will now focus in more detail on the role of other services in managing aggression.

Chapter five

5.1. The Role of Services in Managing Aggression in People with a Learning Disability-Introduction

Studies 4 and 5 will focus on the role of both community and specialist health staff in managing aggression. Chapter 5 will begin with an overview of anger and aggression in people with a learning disability, before introducing study 4, which examines the role of community services in managing aggressive behaviour.

Aggressive behaviour can pose one of the greatest challenges to services for people with a learning disability (Black et al., 1997; Harris, 1993; Cooper & Mendonca, 1991) and, as was found in study 3, can be one of the most common reasons for referral to community clinical psychology services. Such behaviour can have a number of negative consequences for the client, carer and family. Apart from the obvious risk of injury from the expression of physical aggression and from carer attempts to manage this (Spreat et al., 1986) aggression can result in high levels of stress for families and carers (Quine & Pahl, 1985) and lead to the breakdown in family and community placements (Borthwick- Duffy et al., 1987; Tausig, 1985).

5.1.1 Anger and Aggression in People with a Learning Disability

Individuals with a learning disability have been found to have difficulties in the recognition, labelling and appropriate expression of emotion, including anger (Kiernan, 1991, Walz & Benson, 1996). This can result in a number of negative consequences for the person, including being perceived as less socially able (Wilczenski, 1991), being socially isolated and rejected (Chadsey-Rusch et al., 1992). When the emotion in question

is anger, inappropriate expression by the client may result in aggression (Rule & Neasdale, 1976). A significant proportion of individuals with a learning disability have difficulty in managing anger (Kiernan, 1991) and the inappropriate expression of anger as physical aggression or abuse can be common (Black et al., 1997; Harris, 1993; Cooper & Mendonca, 1991).

Anger, in itself, is not negative, indeed it can have a number of positive benefits for the individual. These include: an effective means of dealing with threats, a means of promoting the expression of negative feelings and helping to identify stressors which can be avoided or dealt with (Novaco, 1976). On the negative side, anger can have health implications for the person e.g. high blood pressure and headaches (Novaco, 1985), and if the anger is expressed inappropriately as aggression, the consequences can be far-reaching.

The negative consequences of aggression for an individual with a learning disability can also include the breakdown of family (Rousey et al., 1990) and community placements (Lakin et al., 1983); the admission to environments that are more restrictive, and often institutional (Borthwick-Duffy et al., 1987) and which have an associated reduced chance of discharge (James, 1986). Aggression can also result in injury to the client, either through the resultant need for staff to use restraint techniques, or because care staff may react by becoming aggressive themselves (Rusch et al., 1986).

Challenging behaviour in general, and aggression in particular, poses a threat to the ideals of service provision for clients with a learning disability. As noted above, Tyne and O'Brien (1981) outline five criteria

by which a service can be measured, including community presence and participation, positive relationships with others and the promotion of respect for the individual. Clearly, for the client with a learning disability who displays aggression, these criteria may be significantly more difficult to achieve and the service provision may be more restrictive as a result. It is therefore necessary to explore the nature of anger and aggression, and its impact on clients and carers in more detail.

5.1.2 Defining Anger and Aggression.

Anger has been defined as an emotional state, involving three aspects. The first relates to the physiological changes the individual undergoes. These include the increased activity of the cardiovascular and endocrine systems and increased physical tension (Chesney & Rosenman, 1985). The second aspect is cognitive i.e. the associated labelling, interpretations, thoughts and intentions to act. Finally, the behavioural component determines which options the individual will choose, e.g. aggression or withdrawal, in response to the physiological arousal and cognitive processes (Black et al., 1997).

While anger and aggression have been found to be distinguishable from each other (Howells, 1988), they are frequently interlinked. The definition of aggression, however, is not straightforward. While some authors focus only on the observable behaviours associated with aggression, others include cognitive factors such as intent (Geen, 1990) and situational factors (McDonnell et al., 1991). In addition, the term is used to cover a wide range of behaviours (McDonnell & Sturmey, 1997). More recently, some authors have moved away from the emphasis on physical violence alone, and have stressed the need to include threats and other forms of verbal aggression. It is argued that these are more common than, and as

psychologically disturbing to, the victim as physical violence (McDonnell & Sturmey, 1997).

Aggression, therefore can be defined as having a number of elements:

- It covers a range of behaviours including physical violence, threats and verbal aggression (McDonnell & Sturmey, 1997).
- It is any form of behaviour directed at the goal of harming or injuring another person (Bornstein et al., 1981)
- As such, it includes an element of intent (Berkowitz, 1974).

5.1.3 Theories of Aggression in People with a Learning Disability

Gardner and Cole (1984) point out the dearth of theoretical models to explain aggression in clients with a learning disability, as compared with other client groups. A number of authors working in the field of learning disabilities have, however, applied behavioural principles to the study of aggression (Carr et al., 1990; Gardner & Cole, 1984; La Vigna & Donnellan, 1986; Whitaker, 1993).

Behavioural models would identify aggression as an operant behaviour i.e. it serves a function for the individual with a learning disability. In this model, operant behaviours, such as aggression, are established and maintained by reinforcers. These reinforcers are either positive i.e. the application of something rewarding for the person contingent on them being aggressive e.g. attention, or negative i.e. the removal of something non-reinforcing (or unpleasant) for the individual contingent on the aggression e.g. a demand. Under both circumstances, the behaviour is likely to increase.

Thus, aggression is viewed as being maintained by its consequences for the individual. The consequences may be external to the individual, for example, to gain staff attention or internal, for example, self-stimulation to relieve feelings of boredom. Such models implicate the role of staff responses in exacerbating or reducing the aggression (Hastings & Remington, 1994).

Gardner and Cole (1984) propose a multi-component model of aggression in clients with a learning disability, which is also essentially behavioural. It argues for the following:

- Aggression occurs in a context where the environment incorporates both setting events and discriminative stimuli which effect the likelihood of aggression occurring.
- Aspects of the individual determine whether they perceive and react to provocation with aggression.
- The consequences of the behaviour effect the likelihood of its occurring again.

This leads to a treatment model which has three main components: ecological interventions which change the environment within which the aggression occurs; positive programming interventions which aim to teach the individuals skills in dealing with potentially provoking situations and behavioural approaches to target contingency management (Whitaker, 1993). A fourth aspect, not explicitly outlined in the model are the reactive strategies required to maintain the safety of the client and others.

There is a large body of research evidence which indicates that behaviours such as aggression are maintained by their behavioural consequences (Emerson, 1995; Iwata, 1994). However, it is acknowledged that a

number of other factors can influence the expression of aggression in clients with a learning disability. Recent work has suggested the role of neurotransmitters in behaviours such as self-injury (Schroeder et al., 1995) and aggression (Schroeder & Tessel, 1994) and that the behaviour may be maintained by the subsequent release of opiate-like substances. This model would indicate a role for the medical profession in managing aggression. In addition, a role for general health factors has also been found. Challenging behaviour has been found to relate to factors such as: physical illness (Peine et al., 1995), epilepsy (Gedye, 1989) and, in particular mental illness (Mace & Mauk, 1995). Aggression, particularly, has been found to be more common in people with a learning disability and associated mental illness (Fraser & Nolan, 1994; Bouras et al., 1988). People with learning disabilities are recognised as being at increased risk for developing mental illness. Prevalence rates vary, due to difficulties in diagnosis, but can be cited as high as 50% (O'Hara and Sperlinger, 1997).

In addition, cognitive theories have been found to have some applications for clients with a learning disability. Novaco (1976) and Zillmann (1979) emphasised the role of cognitive factors in their early theories of aggression. This work has now been greatly developed and cognitions are now seen as playing an essential mediating role in aggression. These cognitions mediate in terms of expectations i.e. how an individual believes he or she will respond to a situation, and appraisal i.e. the meaning they attach to that situation. Novaco (1975) argues that anger has three components; behavioural, physiological and cognitive, and that it is fundamental cognitive processes which differentiate those individuals who are prone to aggression from those who are not. Novaco and Welsh (1989) propose five cognitive biases which may play mediating roles in anger and aggression.

- Attributional bias i.e. the individual attributes the behaviour of others to personal characteristics rather than situational factors.
- Perceptual matching i.e. aggressive individuals are more likely to perceive aggression in ambiguous situations than non-aggressive individuals
- Anchoring effect i.e. the reduced ability of aggressive individuals to make use of mitigating information.
- False consensus i.e. a tendency to assume that a larger proportion of others' behaviour, values and opinions are the same as your own than is the case.
- Attention cueing i.e. the vigilance of aggressive individuals for aggressive cues in the environment.

Some of the criticisms of the theory are that, while there is a body of evidence for the notion of attributional bias, there is less evidence for the remaining hypothesised cognitive processes. In addition, Novaco (1985) himself acknowledges that the exact relationships between cognitive factors, anger and aggression remain to be validated. It is also unclear if these theories can be directly applied to clients with a learning disability, who, by definition have cognitive difficulties. Black et al. (1988, 1997), however, outline how components of cognitive theories can be used, in conjunction with behavioural approaches, to develop treatment approaches for people with a learning disability. These include strategies such as self-monitoring and instruction, impulse control and relaxation training.

The complexity of factors relating to aggression and the varied impact of the behaviour itself mean that treatment responses may also be quite varied. These may range from an appointment with a general practitioner for the treatment of a simple health problem to a referral to a specialist learning disability health service for people with severe and complex

challenging behaviour. Most interventions, however, implicate a role of others in both potentially maintaining and helping to reduce challenging behaviour. Some of the service responses to challenging behaviour are outlined in studies, 4, 5 and 6 below.

Chapter six

6.1 Study 4: Community Based Service Responses to Aggressive Behaviour - Introduction

Services responses to challenging behaviour occur within a variety of contexts. The person with a learning disability may live at home, supported by family or paid carers, with input from specialist community learning disability team members. Alternatively, if the challenging behaviour is so severe that it cannot be managed in a community residential setting, the client may be admitted to a specialist inpatient unit. Regardless of the setting, the successful management of challenging behaviour generally, and aggression in particular, requires three components. These are outlined below.

6.1.1 Proactive Strategies

These are generally longer term strategies which are designed to prevent the behaviour occurring. These strategies can usefully be divided into environmental or ecological changes and positive programming approaches (Baker et al., 1998). Ecological approaches would target aspects of the environment e.g. noise, lighting, overcrowding that are triggers for the aggression. In addition, such ecological approaches would include interventions designed to alleviate internal triggers for aggression e.g. medical interventions to reduce pain. Whitaker (1993) found that the number of research studies reporting on the use of ecological approaches was small.

Positive programming approaches refer to the process of teaching the individual the skills required to help reduce aggression. These may be functionally equivalent skills e.g. teaching a client to ask for an item, rather than using aggression to obtain it; general skills training which is

designed to enhance the individuals' self-esteem and feelings of confidence, functionally related i.e. teaching an alternative means for the person to get his or her needs met and coping skills i.e. teaching skills to help the person deal with situations they can't avoid or change e.g. relaxation training.

6.1.2. Behavioural Approaches

These approaches are based on applied behavioural principles to the study of aggression (Carr et al., 1990; La Vigna & Donnellan, 1986; Gardner & Cole, 1984; Whitaker, 1993) which, as was outlined above, view aggression as an operant behaviour which is established and maintained by reinforcers. The interventions are designed to identify the function of the behaviour for the individual and manipulate the antecedents and consequences of a given behaviour i.e. contingency management.

Examples may include providing reinforcement for behaviours other than aggression, or for behaviours that are incompatible with aggression. These strategies are commonly reported in the research literature and have been found to be effective (Whitaker, 1993; Lindsay, 2001), however, they are not always paired with ecological approaches (McKenzie et al., 1999b).

In addition, a recent review by Emerson et al. (2000) found that clients rarely had a written behavioural plan and the most common approaches to their challenging behaviour were physical restraint, sedation, seclusion and mechanical restraint.

6.1.3 Reactive Strategies and Physical Intervention

These refer to the strategies used at the time to maximise the safety of the client and others. As such they are short term. Reactive strategies may

include redirection, active listening, stimulus change and physical interventions (McDonnell and Sturme, 1997).

The ability of services to respond effectively to the challenge posed by aggression relies on staff being able to react safely and appropriately to occurrences of aggression, develop interventions based on a functional analysis of the behaviour and implement alternative strategies to meet the individuals' needs (Department of Health, 1993; Harris et al., 1997; Mental Welfare Commission, 1998).

One reactive strategy which may be used is physical intervention (Jacobson, 1992). This is any action by one person which restricts the movements of another (Harris et al., 1997) and broadly covers direct physical contact to prevent a behaviour occurring, the use of barriers e.g. locking or blocking a door, materials or equipment which restrict movement. Physical interventions are required to be legally justifiable and demonstratively in the best interests of the individual. Where they are used, techniques should employ minimum force necessary for the shortest period required and be part of an individuals' care plan. (Mental Welfare Commission, 1998). In addition, it is emphasised that physical interventions should only be considered following the consideration of alternative approaches (Mental Welfare Commission, 1998; Harris et al., 1997).

Recent research has, however, suggested that these recommendations are not always being followed (Emerson et al., 2000) and indicates that social care staff place greater emphasis on initial reactive strategies in managing challenging behaviour, while health staff focus on behavioural approaches. Neither group emphasised longer-term strategies of helping the individual

to meet his/her needs in alternative ways (McKenzie et al., 1999b). The focus on reactive strategies alone may mean that such procedures become self-maintaining and may increase the chances of the behaviour occurring again (Harris et al., 1997).

There are situations, however, where staff may need to intervene using physical interventions to prevent injury to the client, themselves or others. Such unplanned responses from staff are associated with higher levels of risk to those involved (Hill and Spreat, 1987). There is, therefore, an emphasis that physical interventions should only be carried out by staff trained in their use (Mental Welfare Commission, 1998; Harris et al., 1997). Previous research in health settings has indicated that training in aggression management and prevention can lead to a reduction in behavioural incidents (Allen et al., 1997) and is negatively related to serious assault (Rosenthal et al., 1992).

McDonnell and Sturmey (1997) review some of the research relating to staff training in aggression management and prevention techniques. They argue that such training overall will lead to greater efficiency in staff teams. In addition, they suggest that, as the behaviour of staff may inadvertently contribute to maintaining aggression, training should play a role in preventing this. Fein et al. (1981) found that accurate knowledge levels relating to breakaway and restraint techniques increased from 57-87% following a two-day course. However, no long term data was provided. Infantino and Musingo (1985) compared the injury rate of trained staff with untrained staff over a two year period. Only 3% of trained staff were found to have been assaulted compared with 37% of the untrained group. However the participant selection was non-random and the results could have been attributed to this factor. A more rigorous study

was carried out by McDonnell (1988) of a two day course. This found significant increases in staff knowledge and confidence following training and staff could competently carry out simple restraint procedures. Differences in knowledge levels were maintained four months after training.

Similarly, Baker and Bissmire (2000) found that while staff were significantly more confident following training in crisis management and prevention, no significant reduction in the number of incidents reported was found. In addition, they found that staff were more likely to use physical intervention techniques than other approaches, following training. While there is some indication that training in physical intervention techniques can result in increased staff confidence and knowledge, the results of the studies cited were restricted by methodological limitations. Despite the fact that there is clear guidance on the use of physical intervention techniques (Mental Welfare Commission, 1998; Harris et al., 1997) it is still unclear to what extent physical interventions are used in community settings in preference to other approaches, whether staff receive training in their use and what effect, if any, training would have on experience of assault and attitudes towards it.

6.1.4 Staff Knowledge and Training

Well trained and skilled staff have been identified as essential in the provision of quality learning disability services for some time in documents ranging from the 1971 paper 'Better Services for the Mentally Handicapped (Department of Health) to the more recent Scottish Office review of learning disability services 'The Same as You?' (Scottish Executive, 2000). One assumption commonly made is that qualified health service staff, who have received a professional training, will have greater

levels of knowledge and skills than social care staff, who may not necessarily have received a professional training. Recent research suggests that knowledge levels of health staff in relation to methods of managing challenging behaviour and the defining characteristics of a learning disability, while low, is greater than that of social care staff (McKenzie et al., 1999b). Knowledge has also been noted to differ in emphasis, with social care staff being more aware of reactive responses to challenging behaviour, and health staff tending to give greater emphasis to more psychological approaches (McKenzie et al., 1999b).

The assumption of higher levels of knowledge, skill and confidence levels of professional health staff underlies the retention and development of specialist health services. These include specialist support teams, in-patient assessment and treatment units and health care staffed group homes. Research in relation to the service provision for clients with sexually inappropriate behaviours suggests, however, that social care staff are more likely to have received training than health staff. Despite this, health and social care staff do not appear to differ in respect of the type of clients they support and in their confidence levels in doing so (McKenzie, 2001).

The need for an adequate knowledge and skills base in a staff group is particularly pertinent to the management of challenging behaviours such as aggression and violence. This is not only because of the potential for harm it can have for individuals and others, but also because of the stress it can generate for those involved (Spreat et al., 1986; Attwood & Joachim, 1994). It is well established that staff behaviour can impact on the occurrence, non-occurrence and de-escalation of challenging behaviours such as aggression and violence (Hastings and Remington, 1994; Hastings,

1996; Donnellan et al., 1988; Maier, 1996). However, research has indicated staff both lack knowledge about methods of dealing effectively with challenging behaviour (McKenzie et al., 1999b) and their duty of care in intervening if clients pose a risk to themselves or others (Brown et al., 1994; Lyall et al., 1995). Staff have also been found to lack the skills and confidence to effectively manage challenging behaviour (Hastings & Remington, 1994; Bromley & Emerson, 1995; McKenzie et al., 1999b). There are currently a wide range of training courses available, ranging from time-limited formal and informal training to ongoing input (Taylor et al., 1996; McVilly, 1997; McKenzie et al., 2000b).

This training may also range from broad behavioural principles in managing challenging behaviours (McKenzie et al., 2000b) to specific breakaway and physical intervention techniques which are targeted at managing assault (Mental Welfare Commission, 1998). Despite this, a substantial number of staff report that they have not received training or that it is not appropriate for the needs of their job (Smith et al., 1996; McVilly, 1997). As a result, recent reviews have stressed the need to clearly establish the type and nature of the training needs of the service in question and to establish which goals the training is designed to meet (Cullen, 2000).

6.1.5 Summary and Aims of Study 4

Studies 1-3 provided a snapshot of current service provision nationally, within one community learning disability team and in relation to a community clinical psychology service. The results suggested that service provision was patchy nationally, that different team members adopted different working patterns and that aggression was a major reason for referral to community learning disability services. The focus of learning

disability services has changed radically from mediaeval times to the present day and the aims have similarly changed from the ethos of providing practical support, through the provision of education, subsequent segregation to the present day emphasis on integration. The incidence of assault and aggression in people with a learning disability poses a major threat to this aim. As a result service provision ranges from that provided by social care staff in community homes to specialist services provided in secure in-patient assessment and treatment units. The overview above, suggests that aggression and assault are relatively common in learning disability services, and that a number of factors, unrelated to the individual client have been implicated in their expression, including the training, qualifications and confidence of staff. Study 4 aims to examine the impact of aggression on community social care services.

6.2 Study 4: Method

Study 4 aimed to examine the aspects of assault experienced by staff working in social care community settings including:

1. The levels of assault experienced by staff
2. The relationship between the training of staff in the prevention and management of aggression and violence and their experience of assault
3. The relationship between staff training in the prevention and management of aggression and violence and their confidence in managing assaults
4. The strategies used by social care staff in managing assaults

A sample of staff (N=50), who all supported individuals with learning disabilities in social care settings, were surveyed about their experiences in relation to client aggression and violence in their work. Staff worked in community settings in either staffed group homes or in day centres which

the author had contact with as a part of routine clinical work. Staff worked with clients of a range of abilities from mild to profound learning disabilities. Demographic details were recorded in relation to participants' gender, age, organisation, and position in organisation. (See Appendix 1 for questionnaire and scoring criteria). All participants were assured that participation was voluntary and that the responses were anonymous and confidential. All those approached agreed to participate, giving a response rate of 100%. Participants were asked to complete a questionnaire and their responses to the questions were listed and then categorised as shown in Appendix 1.

6.2.1 Reliability

A sample of responses (68%) were scored by an independent rater to give a measure of inter-rater reliability. Inter-rater reliability was calculated as a percentage agreement using effective percentage agreement. This was chosen as it removes the agreement contributed by raters agreeing about the non-occurrence of a response. Reliability scores were computed by dividing the number of agreements by the total of agreements plus disagreements and multiplying by 100 (Jensen, 1959).

Details of Respondents

Thirty-three (66%) were female and 17 (34%) respondents were male. Respondents' ages are recorded below in Table 8

Table 8: Age of Respondents

Age	Number	Percentage
<25	2	4
25-34	13	26
35-44	14	28
45-55	14	28
>55	2	4
Not specified	5	10
Total	50	100

6.3. Study 5: Results

Only significant results are given below. When the statistic chi-square is used, Yate’s correction for continuity has been developed for situations when expected frequencies are small (Yates, 1934). The present study will, however, follow the recommendations of many authors who suggest that the uncorrected chi-square provides a better approximation to the true probabilities in situations where the maginal totals are not fixed (Howell, 1997; Overall, 1980, Camilli & Hopkins, 1979).

6.3.1: Reliability

Inter-rater reliability was calculated as a percentage agreement using effective percentage agreement. (See Table 9). Concordance rates were 82% or above for all items with the exception of three questions, which asked participants: how they enabled clients to express their feelings of anger and frustration, what skills they felt they had in the prevention and management of aggression and violence and in which areas they felt they required more skills in managing aggression. These items had concordance levels of 75, 76 and 75% respectively.

Table 9: Percentage agreement for survey questions

Question	% Agreement
1	88
2a	100
2b	83
3	100
4	84
5	82
6	100
7	92
8	90
9	75
10	76
11a	96
11b	75

6.3.2 Responses to the Questionnaire

The length of employment of respondents is recorded below in Table 10.

Table 10: Length of employment of Respondents

Length of Employment							
< 1 year		1-5 years		5-10 years		Over 10 years	
No.	Percent.	No.	Percent.	No.	Percent.	No.	Percent.
10	20	25	50	12	24	3	6

As can be seen from Table 10, the majority of respondents had worked in learning disability services for 1 – 5 years. A series of Chi square tests found no significant relationships between length of employment and the following variables: Feelings about dealing with aggression; whether individuals had received training or not; experience of aggression.

Respondents reporting experiencing aggression at work

Eighty- eight percent of staff had experienced some form of aggression from clients during the course of their work. The number and percentage of respondents reporting experiencing each type of aggression is recorded below for males, females and all participants in Table 11.

Table 11: Number and percentage of male, females and all respondents reporting experiencing each type of aggression

Type of aggression	Female		Males		Total	
	No.	% within sex	No.	% within sex	No.	% of all respondents
Verbal	18	54.5	4	23.5	22	44
Physical	19	57.6	5	29.4	24	48
Destructive	5	15.2	3	17.6	8	16
Other	5	15.2	2	11.8	7	14

As can be seen from Table 11, of those who had experienced aggression, the most common form was physical aggression (48%). This category included behaviours such as slapping, hair pulling, pushing, head-butting, punching, kicking and biting. A large percentage of staff (44%) had also experienced verbal aggression. Included in this category were behaviours such as shouting and swearing. Sixteen percent of staff reported having experienced destructive behaviours. These included such behaviours as banging doors, throwing things and breaking things. The 'other' category (14%) included behaviours such as spitting, gesturing and self-injury.

Sex differences in the experience of aggression

A higher percentage of females reported having experienced more verbal, physical and other forms of aggression at work than males, while the opposite was true for destructive behaviour. A Chi square test demonstrated a significant relationship between the reporting of verbal aggression and sex with more females reporting verbal aggression than men ($X^2=4.381$, $df=1$, $p<0.05$). A series of Chi square tests found no

significant differences between males and females in relation to reports of destructive, physical and other forms of aggression.

Respondents' feelings about dealing with incidents of an aggressive and violent nature are recorded below in Table 12.

Table 12: Male, female and all respondents feelings about dealing with incidents of an aggressive and violent nature

Sex	Missing			Confident	
	Data	Anxious		No.	% within sex
	No.	No.	% within sex	No.	% within sex
Female	4	23	79.3	6	20.7
Male	1	8	50	8	50
Total	5	31	68.9	14	31.1

Table 12 illustrates that the majority of respondents (68.9%) reported some form of anxiety about dealing with incidents of an aggressive and violent nature. Only 31.1% reported feelings of confidence in relation to dealing with such situations.

Sex Differences in Attitudes towards dealing with Aggression

Nearly eighty percent of females reported feelings of anxiety in relation to dealing with incidents of aggression and only 20.7% reported feeling confident. By contrast, only 50% of the males reported feelings of anxiety, while the other 50% reported feeling confident. A chi square test found that females were significantly more likely than men to report anxiety in relation to dealing with situations of aggression ($X^2=4.131$, $df=1$, $p<0.05$)

The main worries and concerns of respondents in relation to managing aggressive incidents are recorded below in Table 13.

Table 13: Number and percentage of male, female and all respondents reporting each type of concern/worry in relation to managing incidents of an aggressive and violent nature

Type of concern	Female		Sex Male		Total	
	No.	% within sex	No.	% within sex	No.	% of all respondents
Injury to self	13	39.4	4	23.5	17	34
Injury to colleague	8	24.2	5	29.4	13	26
Injury to clients	17	51.5	9	52.9	26	52
Inappropriate response	8	24.2	4	23.5	12	24
Being isolated	5	15.2	0	0	5	10

As can be seen from Table 13, the most common concerns reported by staff related to the possibility of injury to clients (52%) resulting from incidents of an aggressive and violent nature. Twenty four percent were concerned about their abilities to respond appropriately to situations, while 26% were concerned about the possibility of injury to their colleagues and 34% were concerned about the possibility of injury to themselves. Ten percent expressed concerns about situations where they might be isolated as a result of an incident. Staff reported fears of ‘being trapped’ or ‘unable to escape’ at such times. A chi square test illustrated that females were significantly more likely to express concerns about being isolated

than men ($X^2 = 7.33$, $df=1$, $p<0.01$), however two cells were found to have expected frequencies of less than 5 indicating that the result may be unreliable.

The methods reported by respondents being used to maintain their own and others' safety during an aggressive and violent incident are recorded below in Table 14.

Table 14: Number and percentage of male, female and all respondents reporting using each type of methods to maintain their own and others' safety during an aggressive and violent incident.

	Sex					
	Female		Male		Total	
	No.	% within sex	No.	% within sex	No.	% of all respondents
Method for maintaining safety					No.	Percentage
Isolate the client	19	57.6	6	35.3	25	50
Remain calm	5	15.2	2	11.8	7	14
Take up a safe position	7	21.2	3	17.6	10	20
Ensure environment is safe	4	12.1	1	5.9	5	10
Follow guidelines	3	9.1	0	0	3	6
Reaction varies with circumstances	1	3	2	11.8	3	6
Get help	3	9.1	1	5.9	4	8
Create a barrier	1	3	1	5.9	2	4
Don't know	2	6.1	2	11.8	4	8

As can be seen from Table 14, the most commonly reported response to incidents of an aggressive and violent nature was to isolate the client. Only 6% of respondents referred to following guidelines and some staff were unsure about what they should do. Fourteen percent identified the need to stay calm, while others recognised the need for safety in relation to their own positioning (20%) and the environmental conditions (16%). A series of chi square tests found no significant differences between males and females in relation to responses to aggressive incidents.

Training

Only 22 out of the 49 respondents who replied to this question (44.9%) reported having been trained in the prevention and management of aggression and violence. The remaining 27 (55.1%) had not. The number and percentage of staff reporting receiving each type of training is recorded in table 15.

Table 15 Number and percentage of staff reporting each type of training

Type of training received	No. of those reporting receiving training (n=18, missing data = 4)	Percentage
In-service	5	27.8
Control and restraint	3	16.7
Outside course/talk	3	16.7
Distance learning pack	2	11.1
Advice from health staff	2	11.1
Specific techniques e.g.. wrist hold	2	11.1
As part of nurse training	1	5.6

Ten respondents (71.4%) found training in the prevention and management of aggression and violence useful, 4 (28.6%) did not and the remaining 8 did not respond. Of those who had received training in the prevention and management of aggression and violence, 56% reported that it had helped in increasing their confidence and 33% reported that it had helped in increasing in their skill levels. Four did not respond. A Chi square test found no significant differences overall between previous training and the experience of aggression at work.

Gender differences in the experience of training

Fourteen females (42.4%) and 8 males (47.1%) had received training in the prevention and management of aggression. A Chi-square test found no significant difference between males and females in relation to whether they had received training or not.

Table 16 illustrates the number of males and females reporting feelings of anxiety or confidence in relation to whether they had received training in the management of aggression.

Table 16. The number of males and females reporting feelings of anxiety or confidence in relation to whether they had received training in the management of aggression

	Anxious				Confident			
	Male		Female		Male		Female	
	No.	Perc.	No.	Perc.	No.	Perc.	No.	Perc.
Trained	2	28.6	10	76.9	5	71.4	3	23.1
Untrained	6	66.7	12	80	3	33.3	3	20
Missing data: trained = 2, untrained = 4								

Table 16 illustrates that seventy-one percent of males who had received training reported feeling confident while sixty-seven percent of those who had not reported feeling anxious. A Chi square test illustrated a significant difference between trained males and females in relation to reported levels of anxiety, with more trained females than males reporting feelings of anxiety in relation to managing aggression ($X^2=4.412$, $df=1$, $p<0.05$). This result, however, must be treated with some caution as two cells had expected frequencies of less than 5. No further significant differences were found between untrained males and females in relation to reported levels of anxiety or confidence. Similarly, no significant differences were found between trained males and females in relation to reported levels of confidence, although this result neared statistical significance ($X^2= 3.71$, $df=1$).

No significant differences were found between either the trained and untrained males and trained and untrained females in relation to either reported levels of anxiety or confidence in managing aggression.

The number and percentage of respondents reporting each way in which they enabled clients to express their feelings of anger and frustration are recorded below in Table 17.

Table 17: Number and percentage of female, male and all respondents reporting each way in which they enabled clients to express their feelings of anger and frustration

	Sex					
	Female		Male		Total	
Ways of enabling clients	No.	% within sex	No.	% within sex	No.	% of all respondents
Discussion	15	45.5	6	35.3	21	42
Listening	12	36.4	2	11.8	14	28
Reassuring	2	6.1	0	0	2	4
Establishing triggers	1	3	2	11.8	3	6
Provide alternative	7	21.2	2	11.8	9	18
Provide privacy	4	12.1	0	0	4	8
Redirect behaviour	4	12.1	2	11.8	6	12

As can be seen from Table 17, the most commonly reported ways of enabling clients to expression their feelings of anger and frustration were through discussion (42%) and listening (28%). Others reported methods relating to behavioural techniques such as establishing triggers/antecedents (6%) and redirecting behaviour (12%). Environmental and activity related aspects were also reported with 8% of respondents referring to ways of providing privacy and 18% referring to the need to provide alternative activities. The majority of responses tended to refer to methods relying on the verbal communication abilities of clients. A chi square found that females were significantly more likely than men to help a client express feelings of anger through discussion ($X^2= 5.84$, $df=1$, $p<0.05$).

The number and percentage of respondents reporting each type of skill they felt they had in the prevention and management of aggression and violence are recorded below in Table 18.

Table 18 Number and percentage of female, male and all respondents reporting each type of skill they felt they had in the prevention and management of aggression and violence

	Sex					
	Female		Male		Total	
Type of skill	No.	% within sex	No.	% within sex	No.	% of all respondents
Remaining calm	11	33.3	4	23.5	15	30
Knowledge of antecedents	6	18.2	1	5.9	7	14
None	10	30.3	7	41.2	17	34
Experience	9	27.3	4	23.5	13	26
Communication	2	6.1	2	11.8	4	8
In service training	3	9.1	2	11.8	5	10

As can be seen from Table 18, the most commonly reported skills respondents felt they had in relation to the prevention and management of aggression and violence were the ability to remain calm (30%), knowledge of antecedents/triggers (14%), experience (26%) and communication skills (8%). Thirty four percent of respondents, however, felt that they had no skills in the prevention and management of aggression and violence. A series of chi square tests found no significant differences between men and women in relation to identified skills.

Twenty eight females (96.6%) and 15 males (93.8%) identified a need for further training in the prevention and management of aggressive and violent incidents, giving a total of 43 (86%) out of all respondents. The number and percentage of respondents who felt there was a need for further training identifying each area of further training are recorded below in Table 19

Table 19: Number and percentage of female, male and all respondents identifying each area of further training

Area of need identified	Sex				Total	
	Female (n=28)		Male (n=8)		No.	% of all respondents (n=36)
	No.	% within sex	No.	% within sex		
Control and restraint techniques	13	46.4	0	0	13	36.1
All areas	7	25	4	50	11	30.6
Safety issues	4	14.3	1	12.5	5	13.9
Redirection	3	10.7	1	12.5	4	11.1
Prevention	4	14.3	0	0	4	11.1
Legal issues	0	0	2	25	2	5.5
Missing data	0		7		7	

As can be seen from Table 19, the most commonly cited area identified for further training by respondents were in control and restraint techniques (36.1%), safety issues (13.9%), while redirection and diffusion techniques (11.1%) and prevention (11.1%) techniques were identified an equal number of times. Over 30% percent of respondents felt that they needed

further training in all areas and a couple of people highlighted the need to address the legal aspects. A significant sex difference was found in relation to requests for further training, with 13 (46.4%) of females requesting 'Control and Restraint' techniques and no males ($X^2 = 9.05$, $df=1$, $p<0.01$).

6.4 Study 4: Discussion

Study 4 aimed to examine levels of assault experienced by social care staff, the strategies used by staff to manage assault and the relationship between training in the prevention and management of aggression and experience and confidence in managing assault.

The most significant finding from study 4 was that almost all of the social care staff had experienced some form of aggression at work. In addition, the most common form of aggression was physical aggression e.g. kicking, punching, and head-butting. Unfortunately, this finding is consistent with previous research which has indicated that aggression and assault are common forms of challenging behaviour displayed by clients with learning disabilities, and that they are increasingly likely to occur in community settings (Department of Health, 1993; Qureshi & Alborz, 1992; McKenzie et al., 2000a).

As well as the obvious risk of physical harm that such behaviour poses to staff and clients, aggression and assault have been found to be perceived as more challenging by staff working in community settings (Lowe & Felce, 1995) as compared with hospital staff. In addition, aggression has been seen as posing one of the greatest challenges to services (Black et al., 1997; Harris, 1993). Aggression and assault can also be one of the main factors resulting in institutionalisation for the client (Borthwick-Duffy et

al., 1987). The initial finding of study 4 therefore suggests that the experience of aggression by staff continues to be common in community settings and that this is likely to have an impact on staff and clients.

Study 4 also suggested, however, that this impact differs for males and females, with a greater percentage of females than males reporting the experience of all types of aggression, with the exception of destructive aggression. In addition, females were significantly more likely to report verbal aggression. This result differs from that found by McKenzie et al. (2000a), when no significant differences in reports of aggression were found for males and females working in services for people with learning disabilities. However, the difference may be accounted for by the fact that McKenzie et al. (2000a) did not specify that verbal aggression should be included, and respondents may therefore have only reported physical assaults.

The gender difference found in study 4 may be attributable to features associated with gender such as size, height and strength (Hastings et al., 1997). Clients may be more inclined to threaten individuals who have less physical presence. Women are generally smaller and lighter than men and may therefore appear as easier targets.

Despite most of the staff having experienced some form of aggression at work, the majority had not received training in the prevention and management of aggression. The successful management of aggression, as with other forms of challenging behaviour, has been noted to require three main factors: reactive strategies, psychological approaches and longer term positive programming approaches (Department of Health, 1993).

The importance of well-trained staff, skilled in these approaches, in the provision of high quality services has been highlighted by a number of authors (Department of Health, 1993, Hogg & Mittler, 1987; Scottish Executive, 2000). The fact that the majority of staff in study 4 had not received any training in the management of aggression suggests that a gap exists between the recommendations about the provision of training that staff require and what they actually receive.

However, in contrast to other studies which have found that training reduces the number of behavioural incidents and is negatively associated with serious assault (Rosenthal et al., 1992; Allen et al., 1997) the present study found no overall relationship between training and reporting of aggression. This finding may relate to the type of training received by staff. McKenzie et al. (1999b) found that social care staff were more likely to emphasise the importance of reactive techniques in the management of aggression, rather than longer-term preventative techniques. It may therefore be that the staff in study 4 are skilled in reacting to aggression, rather than preventing it. This suggestion is supported by the fact that the staff themselves identify their skill in managing aggression mainly in terms of reactive approaches e.g. remaining calm, with only 30% identifying more preventative approaches e.g. picking up triggers and common antecedents to aggression.

Training did, however, appear to have some impact on the confidence of men to deal with aggressive incident, with almost three-quarters of those who had received such training reporting confidence. Similarly, two thirds of men who had not received training reported anxiety in dealing with aggression. This relationship did not appear to hold true for women, with the majority expressing feelings of anxiety regardless of whether they had

received previous training or not. Overall, no statistically significant differences were found between those who had been trained and those who had not in relation to either anxiety or confidence in managing challenging behaviour. While the statistical significance of the impact of training on staff confidence could not be established, perhaps due to the small sample size, this result would appear to have clinical significance in terms of identifying possible differential responses to training according to gender (Jacobson, 1988).

A significant difference was, however, found between trained men and women, with women being significantly more likely to report feelings of anxiety when managing aggression. The impact of training on staff confidence would, therefore, not appear to be straightforward, with gender appearing to play some form of mediating role. This difference may be due to a number of factors. Firstly, as noted females tend to be physically smaller and weaker than males and they may be aware that a stronger, heavier male may still be able to harm them despite training. Secondly, the study did not ask for details of the previous training received. It may be that the females received training with a different emphasis from the males, for example, de-escalation techniques rather than 'control and restraint' techniques. This may lead to differences in confidence in managing aggression, despite training. This may be supported by the fact that a significantly greater number of females wanted training in 'control and restraint' techniques compared with men.

Overall, however, the majority of the social care staff in study 4 lacked confidence in managing aggression. Their main concerns were in relation to the aggressive client or other clients being injured, their colleagues being injured and that they would respond inappropriately to the incident.

This suggests that the staff group in question were aware of their duty of care i.e. their responsibility to take reasonable steps to intervene to prevent harm to the client or others (McKay, 1991). Somewhat surprisingly, only 34% of staff reported a concern that they themselves would be injured. Some nursing staff have been found to hold the attitude that experiencing assault is part of their job (Poster, 1996) or that they are to blame for it (Ryan & Poster, 1989). Such attitudes may be shared by social care staff, resulting in an acceptance of assault as an occupational hazard.

In relation to the strategies reported by staff as being used to manage aggressive incidents, the majority did not involve physical interventions on the part of staff. Instead the staff emphasised the need to remain calm, ensure that people were safe or ask others to leave the situation. However, as with previous studies (McKenzie et al., 1999b) there was a lack of emphasis on the use of longer-term strategies to help the individual. This may mean that situations are perpetuated whereby the client continues to display aggression and staff continue to ensure the safety of others, but the cause of the aggression is not addressed or resolved. This would suggest that staff may need broader training in managing aggression that encompasses environmental, behavioural and positive programming approaches as well as reactive strategies (Whitaker, 1993; La Vigna & Donnellan, 1989).

Such longer-term strategies may involve assisting the client to make his or her needs known in a more appropriate way or to express anger and frustration more constructively. While it is acknowledged that engaging in aggression may result from a number of factors, the inability to deal appropriately with negative feelings such as anger and frustration has been identified as one causal factor in aggression (Black et al., 1997; Moffat et

al., 1995). Clients with learning disabilities have been found to have greater difficulty in both identifying emotions in themselves and others (Walz & Benson, 1996). In addition, staff have been found to overestimate the ability of clients to use this skill (Moffat et al., 1995). It has been suggested that these difficulties can result in negative interactions with others (Chadney-Rusch et al., 1992).

The most common strategies reported by respondents in the present study to help clients to deal appropriately with their feelings of anger and frustration were discussion (42%) and listening (28%). Active listening and helping the client to label feelings through discussion have been identified as useful strategies in assisting clients with a learning disability to build an emotional vocabulary (Benson, 1995). However, a number of the other strategies cited by the staff involved redirecting the client from an expression of their feelings. While this may be an entirely appropriate response if the client is already nearing a crisis stage in relation to displaying aggression, the exclusive use of such redirection strategies may prevent the client learning more appropriate emotion expression skills in the long-term (Black et al., 1997). This again suggests the need for staff to receive a broad-based training in the prevention and management of aggression and violence.

In summary, models of aggression in people with a learning disability are predominantly behavioural. Interventions based on such models have been found to be largely successful in reducing challenging behaviour, including aggression (Emerson et al., 2000). The present study, however, suggested that staff did not conceptualise the client's challenging behaviour in behavioural terms and instead responded in a largely reactive manner. Research by Emerson et al. (2000) suggests that guidelines based on

behavioural models of aggression and challenging behaviour are not widely available to support staff. In the present study, very few staff reported that they would respond to aggression by following existing guidelines. This may be for a number of reasons, including the fact that these guidelines may not have been developed for the client they support. This suggests that levels of aggression experienced by community staff will remain high because approaches to them are largely reactive. Study 4 suggests that specialist staff in community learning disability teams need to begin to work with community staff to devise effective interventions which account for the following; the functional analysis of the clients' behaviour; any medical or health needs of the client; the broad context within which the staff work (including support, values, policies etc.) and the training needs of staff.

Methodological limitations

Study 4 does, however, have limitations. As was noted above, not all respondents gave details of the type of training they had received in the management and prevention of aggression. It is therefore possible that the results of the study are attributable to differences in training received by staff. A more detailed examination of the specific effects on attitudes and behaviour of particular training components would help clarify this issue. In addition, the study did not document the number or severity of the incidents of aggression reported by staff. The definition of what constitutes aggression can be subjective (Arnetz et al., 1996) and it may be that factors such as the experience of a particularly serious assault or a large number of assaults influenced both reporting of aggression and responses relating to skills in, and feelings about, managing aggressive incidents.

In summary, study 4 found that the majority of social care staff had experienced assault in the course of their work with people with a learning disability. Despite this, less than half had received training in the prevention and management of aggression. Such training seemed to impact differently on males and females, with trained males feeling confident in managing aggression, and untrained males feeling anxious. The majority of females reported feelings of anxiety regardless of previous training. Staff reported strategies for dealing with aggression which mainly involved withdrawal of themselves and others rather than physical interventions. However, there was a neglect of longer-term strategies for dealing with aggression.

Chapter seven

7.1 Study 5: Service Provision in Inpatient Settings - Introduction

The settings within which interventions for people with challenging behaviour take place can vary greatly according to the nature of the behaviour and the skills and needs of the carers. Responses to referrals relating to challenging behaviour may range from input from local community learning disability teams to specialist in-patient units. For those clients whose current behaviour cannot be managed in community settings, in-patient assessment/treatment units offer an alternative (Newman & Emerson, 1991; Scottish Executive, 2000).

Interventions used in in-patient units have been shown to be effective (Gaskell et al., 1995) and to lead to clients being returned to their community placements. A number of advantages of secure units have also been outlined, including the ability to provide a therapeutic environment in terms of clear boundaries and expectations, structure and predictability, and team approaches (Turner, 1998). In addition, they have been identified as a means of providing protection to others, presenting a short term solution to acute problems, acting as a centre of excellence and providing confidence to other services who know that specialist facilities are available if required (McBrien, 1987).

However, there have also been a number of criticisms of such units. It is recognised that staff employed to work with such clients are at risk of experiencing high levels of assault (Ghaziuddin & Ghaziuddin, 1992). In addition, there is a real concern that behaviours are not being addressed in the environments in which they occur, that the existence of the unit may prevent the development of skills in local services and that grouping people with difficulties together may actually compound their problems

(McBrien, 1987; Emerson et al., 1987). Previous criticisms of unit-based interventions have centred around the failure of interventions to generalise or transfer to the community setting once the service user has been discharged, and the inherent lack of validity in an assessment in an unusual environment carried out by staff with different skill levels and approaches (McBrien, 1987). Such environments can also immediately constrain the social opportunities that individuals have (Novaco, 1993; Clegg, 1993) and place an emphasis on the interaction between clients and staff in resolving or escalating conflict situations (Black et al., 1997).

The social environment has been identified as being particularly important for people with a learning disability and it has been argued that frequent relocations and limited social integration is related to continued psychological and behavioural difficulties (Van Minnen & Hoogduin, 1998). Disruption to a person with a learning disability's life resulting from an admission has been identified as contributing to the psychological and behavioural disturbance of service users (Van Minnen & Hoogduin, 1998). On the other hand, research suggests that the way others react to people with a learning disability and their behaviour can influence the likelihood of success in interventions aimed at treating challenging behaviour (Hastings et al., 1995). Better contact may lead to increased quality of communication and more opportunities to model appropriate approaches to challenging behaviour in the situations in which they are known to occur.

It is, however, increasingly being argued that providing intensive support in the community can be a cost-effective model for managing challenging behaviour (Allen & Lowe, 1995). These factors have increasingly led service providers to question the effectiveness of providing unit-based

services, and to examine the benefits of community based services (Dixon, 2000). There is, however, research that suggests that a number of staff related factors may be much more crucial to the successful management of challenging behaviour than the environment in which this management occurs. Some of these factors are outlined below, with particular reference to the management of aggressive behaviour.

7.1.1 Staff Factors Influencing the Support of Clients with a Learning Disability who Display Aggression

Since the move to community-based service provision, paid care staff are being expected to support people with learning disabilities with an increasing range of challenging behaviours in ordinary living situations (Hill & Bruininks, 1984; Dagnan et al., 1998). Both aggression (Harris, 1993) and assault (Department of Health, 1993; McKenzie, 2000a) are common forms of challenging behaviour and, with the implementation of community care policies, are increasingly likely to be encountered in community settings (Qureshi & Alborz, 1992). Staff working in community based learning disability services have also been found to be more likely to be victims of assault than staff working in alternative jobs (McKenzie et al., 2000a).

A number of studies have found that, in general, staff supporting individuals with a learning disability may be at risk of assault (Harris, 1993), particularly if the individual also has a psychiatric disorder (Ghaziuddin & Ghaziuddin, 1992). As noted above, one of the difficulties identified for individuals with a learning disability is with recognising, regulating and expressing emotions in general (McAlpine et al., 1991) and anger in particular (Kiernan, 1991; Black et al., 1997). This factor, coupled with communication difficulties and intellectual impairments may

result in anger being inappropriately expressed as aggression (Cooper & Mendonca, 1991, Harris, 1993). While anger may increase the probability of aggression occurring (Black et al., 1988) the individual also has other options which may include withdrawing from the situation, suppressing the emotion or engaging in verbal rather than physical abuse. Staff interventions may be crucial in escalating or de-escalating a situation (Black et al., 1997; Maier, 1996).

Rowett and Breakwell (1991) present an assault cycle model. This outlines five phases, with the individual moving from their normal state during the triggering phase, through an escalation phase, when the individual becomes increasingly less likely to respond to staff interventions. This is followed by the crisis phase when assault becomes likely and a ninety minute recovery phase during which the risk of assault occurring again remains high. Finally the client regresses below his or her normal level and physical and mental exhaustion is common.

A number of models have also outlined predisposing factors relating to assault in psychiatric settings. Maier (1996) argues that, while verbal threats can be a precursor to physical aggression occurring, interventions by staff at this stage (e.g. "talk-down") can be successful in preventing assault occurring. Other authors argue that a significant proportion of assaults that are fuelled by anger are impulsive (Berkowitz, 1983) or are without apparent provocation (Tanke & Yesavage, 1985)

The role that threats of assault play as a warning of impending violence in individuals with a learning disability is less clear. It may be that deficits in the individuals' ability to express emotions appropriately means that grievances or needs are not picked up at an early stage (Holt, 1994) and

that threats may occur at a stage in the process when the individual is already in the crisis phase. The importance of staff being aware of early cues of impending assault can not be overestimated. The expression of physical aggression not only brings with it the risk of injury to the client, carers and others (Spreat et al., 1986) but it can also lead to high levels of stress in families (Quine & Pahl, 1985) and burn-out and job turn-over in staff (Attwood & Joachim, 1994). The resulting disruption to good working practices has been found to lead to increased costs for service providers (Baumeister & Zaharia, 1986) as well as impacting on client care. In more serious cases, community services may be unable to cope and the individual may be institutionalised (Borthwick-Duffy et al., 1987). While physical assault brings with it obvious stresses, verbal abuse and threats of assault have also been found to cause fear and distress for carers (Flannery et al., 1994)

Aggression and assault pose a serious challenge to staff working in learning disability services and staff interventions can be crucial in escalating or de-escalating a situation (Black et al., 1997; Maier, 1996). A number of factors have been suggested as influencing the success or otherwise of staff interventions. Those such as the training, skills and knowledge base of staff; the safe and effective use of physical intervention techniques and staff confidence levels have been addressed previously. Other individual factors such as gender, staff qualification and burn-out are addressed below.

7.1.2 Individual Staff Factors and the Experience of Aggression:

Gender

Research in psychiatric services has illustrated a number of gender differences in relation to the experience and management of assault in

inpatient units, with many studies finding that, in services staffed by both men and women, it is women who are equally or more likely to experience assault as compared with men (Carmel & Hunter, 1991; Chaimowitz & Moscovitch, 1991; Flannery et al., 1994). One study, however, examined a psychiatric unit that was staffed exclusively by women and found that the staff experienced no incidents of aggression (Levy & Harticollis, 1976). Some of the difficulties in interpreting the results may be attributable to differences in male to female staff ratios in certain health professions which have not been taken into account when calculating assault levels. For example, if a unit is staffed by 10 female nurses and only 2 male nurses, there is a greater likelihood that a woman will be present when an assault occurs. Gender differences in staffing ratios must therefore, be taken into account. Research has also found that women may under-report attacks (Rosenthal et al., 1992) which can have a clear impact on the validity of research findings in this area.

Despite these difficulties, gender differences in the experience of assaults is an important area. Not only does this potentially have a significant impact on the victim, with approximately ten percent of women experiencing psychological symptoms associated with work-related assault (Caldwell, 1992) but also on service costs, with assaults on female staff being more costly both in terms of human suffering and medical expenses (Hunter and Carmel, 1992).

Despite the potential impact that gender can have on both the expression and experience of assault, little research has been carried out in this area in relation to learning disability services. One recent study of community learning disability services found no significant differences between males and females in experience of workplace assault (McKenzie et al., 2000a).

This study did not, however, examine the total number of assaults experienced by staff and only focused on physical assault. Flannery et al. (1994) emphasise the importance of extending the definition of assault to include severe verbal threats, as experience of the latter was also found to be distressing and frightening for staff.

7.1.3 Individual Factors and the Experience of Aggression: Staff Qualification.

A number of researchers have highlighted the importance of staff approaches in managing challenging behaviours such as aggression, both in the short (Maier, 1996) and longer term (Hastings & Remington, 1994). A factor which may be associated with staff reactions is work experience. This has been found to be related to staff attributions about the causes of challenging behaviour (Hastings et al., 1997) and, in psychiatric settings, beliefs about the safety of the work-place setting (Poster & Ryan, 1994) and personal experience of assault (Arnetz et al., 1996).

However, despite the fact that clients are often admitted to specialist units because of the extent of their challenging behaviour and the need for specific staff expertise there has been little research into the relationship between assault levels and qualification levels of staff. One study, outlined previously, focusing on health and social care staff working in community settings, found a difference in emphasis in the two groups in relation to the factors that were cited as important in managing challenging behaviour. The health care staff, who predominantly held a professional qualification, were more likely to cite behavioural approaches as important in managing challenging behaviour, while the social care staff who were predominantly unqualified emphasised reactive approaches (McKenzie et al., 1999b). This suggests that there may be an important relationship

between staff qualification and approaches to challenging behaviour such as assault.

Given the relationship between risk of exposure to assault and high levels of staff turn-over and burn-out (Attwood & Joachim, 1994) and the subsequent disruption to client care and increased service costs (Baumeister & Zaharia, 1986) it may be important to establish if a relationship exists between staff qualification and assault.

7.1.4 Individual Factors and the Experience of Aggression: Staff 'Burnout'.

One of the responses used to address behaviours which ordinary community services have had difficulty in addressing has been the development of specialist assessment/treatment units. However, as noted above, such units can present difficulties for staff working in them.

Studies examining violent, assaultative and aggressive behaviour in individuals with a learning disability have often found that those with severe learning disabilities or with a psychiatric disorder are significantly more likely to be involved in assaults (Ghaziuddin & Ghaziuddin, 1992) with prevalence rates ranging from 9.7% in day services to 38.2% in hospitals (Harris, 1993). Staff working for individuals with a learning disability and challenging behaviour have been found to be at a significantly greater risk of being assaulted at some point during their working lives, with the prevalence being greater in in-patient units (Harris, 1993). Thus, working with clients who may exhibit assaultative behaviours on a regular and frequent basis can create a stressful environment for staff to work in.

Stress broadly defines the process whereby individuals find themselves unable to deal with the demands that are placed upon them (Payne, 1999). The term 'burnout' is now widely recognised by many people working in learning disability services as a way of describing the effects that persistent stressors can have on staff behaviours and well-being. Maslach (1978) reported that burnout was related to low morale, increased absenteeism, greater job turnover and a reduction in the quality of services provided to clients. Burnout has been conceptualised as a state of emotional exhaustion, depersonalisation and lack of personal accomplishment (Maslach, 1982). A number of potential factors may impact on staff burnout. Bromley and Emerson (1995) identified sources of stress in care staff working with people with challenging behaviour including: repetitiveness of the caring task, difficulty in understanding the client's behaviour, the unpredictability of client's behaviour and difficulty in finding solutions. In addition, the risk of exposure to violence has itself been found to be related to high levels of staff turnover and burnout (Attwood & Joachim, 1994; Caton et al., 1988).

Some of the factors that have been shown to impact on team working were outlined earlier in the thesis, including the cohesiveness of the team, the nature of interactions within the team i.e. interacting, co-acting or counteracting (Fiedler, 1967). Previous research has also suggested the importance of peer support in acting as a buffer against stress for staff working in learning disability services (Rose & Schelewa-Davis, 1997). There has also been evidence to suggest that a relationship exists between team climate such as the function and organisation of the team and stress. Work by Rose et al. (1997) found a relationship between self-rated work stress, anxiety and depression and the extent to which participants felt the climate supported innovation on their part and were committed to high

quality services. The more the organisation or team supported the latter the less stressed, anxious and depressed their staff felt. This suggests a clear role for the team or organisation in reducing the impact of stress, even when the cause of the stress cannot be tackled directly.

The effects of staff stress are now becoming widely recognised as being present in residential services for people with a learning disability both in relation to staff sickness levels and subsequent staff performance (Sharrad, 1992; Hastings et al., 1995; Rose, 1995, 1997; Rose & Schelewa-Davies, 1997). Obviously, staff performance can be crucial, particularly in more specialised units designed to assess, manage and treat clients with significant challenging behaviours. Some studies have demonstrated the relationships that exist between staff behaviours and levels of clients' challenging behaviours (Hastings & Remington, 1994). In addition, inefficient working and care practices have been demonstrated to result in higher costs to service providers (Baumeister & Zaharia, 1986) and a lack of continuity of care to clients (Maslach & Pines, 1977). Poor staff performance is, therefore, not only detrimental to the efficient running of an organisation but may also reinforce and maintain challenging behaviours.

7.1.5 Aims of Study 5

Study 4 found that social care staff working in the community experienced high levels of aggression. It was suggested that the fact that the staff appeared to predominantly use reactive strategies to deal with this aggression may have contributed to the high levels which were reported. A number of other factors have been outlined above which have been found to be related to staff experiences of aggression, including gender, qualification and stress. Study 5, therefore, aims to examine the following

factors in a specialist health service unit for the assessment and treatment of challenging behaviours;

- To examine if a relationship exists, for clients with a learning disability, between threatened assault, attempted assault and actual assault as has been suggested for aggressive psychiatric patients
- To examine the relationship between gender and client assault levels.
- To examine the relationship between personal experience of threatened, attempted and actual assault and staff qualification
- To establish the levels of assault experienced by staff and the relationship between this and level of 'burn-out' as indicated by sickness rates.

7.2 Study 5: Method

The unit in question is part of a health service trust mental health provision for individuals with a learning disability. The unit has five beds and uses ordinary housing adapted for the purposes required. The unit provides a service to five clients who are currently unable to be supported in social care settings because of their severely challenging behaviour, predominately consisting of assaults directed at others. At the time of the study all clients were receiving medication for the treatment of psychiatric illness. In addition, two clients had epilepsy and one had significant autistic features.

All clients displayed verbally and physically aggressive behaviour towards staff. Four clients with severe learning disabilities were resident in the unit throughout the period of the study. Of these, two were male and two were female. The remaining place was occupied on separate occasions by two male clients with mild learning disabilities. The ages of the clients ranged from 22 to 54. All of the clients had previously been supported by

social care staff in 24 hour staffed, non-statutory, community based settings. Referrals had been made to the unit for assessment and treatment of the clients' aggressive behaviour, which could no longer be managed by the staff working in the community settings.

The unit is staffed by a mix of qualified and unqualified nursing staff with no significant differences between the gender of staff employed at the different nursing grades. Nursing input into the unit per calendar month is recorded in Table 20 below:

Table 20: Nursing Input to the Unit per calendar month

Nursing Grade	Hours of Input
Qualified	1278
Unqualified	1090
Total	2368

All staff in the unit were invited to participate in the study and were assured that information gathered relating to them would be kept confidential and that they would not be identified individually in any way by the study. Seven of the staff were male and 8 were female. Ages ranged from 22 to 45 (Mean = 34.6, SD = 7.92). All staff agreed to participate, giving a response rate of 100%. All staff had received training in the prevention and management of aggression and violence, including de-escalation techniques and methods of physical intervention. The unit also has input from multi-disciplinary team members, including psychiatry, clinical psychology, speech and language therapy, physiotherapy and dietetics.

Daily records of assaults in the unit were recorded by nursing staff on sheets specifically designed for this purpose (see Appendix 2). Recording sheets were designed in conjunction with the ward team and staff received training in their use. The sheets were dated and staff were simply required

to tick the level of assault experienced, the time at which it had occurred and sign the form. Staff were asked to complete the sheet as soon as was practicable following the incident. The member of staff involved in the incident completed the form. If more than one member of staff was involved in the actual assault, all staff would record this separately. In situations where staff were present, but not involved in the incident only the person involved would record the incident. Assaults were graded according to level as below:

- Verbal Threats of Physical Assault
- Attempted Physical Assaults
- Actual Physical Assaults

In an attempt to enhance the reliability of recording methods the definitions of the above categories were agreed by the staff group: Verbal threats relate to circumstances where a client threatens to physically assault someone but does not actually follow through the threat (e.g. the client states, "I'm going to hit you!" but does not do so. Insults and other forms of verbal aggression are not included). Attempted physical assaults relate to circumstances where a client tries to physically assault someone but is successfully prevented from doing so by staff intervention (i.e. physical restraint is successfully deployed by staff in managing the situation). Actual physical assaults are where the client causes harm to someone by the use of violent behaviour (e.g. hitting, kicking, biting etc.). Results were collated by the ward manager and collected on a monthly basis by the author for analysis.

The data recorded was collected over a thirty-five month period and the relationship between assault levels analysed using a Pearson's product moment correlation.

Staff Gender and Assault Levels

The gender of the member of staff on the receiving end of a threatened assault, attempted assault or actual assault was also recorded over this thirty-five month period by matching it with the staff signature on the incident recording form. The data was collated and the relationship between variables analysed using an unrelated t-test analysis. The ratio of the female: male hours worked in the unit was also calculated and the raw data was adjusted to account for differences in hours worked according to gender to give a mean number of threatened, attempted and actual assaults per month separately for males and females.

Staff Qualification and Assault Levels

Whether the member of staff on the receiving end of a threatened assault, attempted assault or actual assault was qualified or unqualified was also recorded over the same 35-month period. This was again determined by matching the staff signature with their known level of qualification. This information was provided by the unit manager. The data recorded was collated and the relationship between variables analysed using an unrelated t-test analysis. The monthly raw data was adjusted to account for differences in hours worked according to qualification to give a comparable mean numbers of threatened assaults, attempted assaults and actual assaults per month for both qualified and unqualified staff.

Sickness Levels and Assaults

Staff sickness levels were recorded and totalled each month for the unit over a further 18-month period. The information was kept routinely by the unit manager and was provided to the author, with staff permission, for the purposes of the study. A distinction between short-term and long-term sickness was used for the purposes of this study (i.e. short-term = periods

of staff sickness up to one week, long-term = over one week). Data recorded was collated and relationships with assault levels over this period were analysed using Spearman's correlation test. A non-parametric test was used on this occasion, as the data were not normally distributed.

7.3 Study 5: Results - Examining Four Aspects of Assaults made against Staff Working in a Health Service Unit

7.3.1 Relationships between Assault Levels

Table 21 illustrates the mean and total number of threatened assaults, attempted assaults, actual assaults and total assaults over the thirty-five month period of the study and the minimum and maximum numbers of each type of assault per month.

Table 21: Mean and total number of threatened assaults, attempted assaults, actual assaults and total assaults over the thirty-five month period of the study and the minimum and maximum numbers of each type of assault per month.

Type of assault	Total	Minimum/ month	Maximum/ month	Mean	S.D.
Threat	1005	1	124	29.6	28.6
Attempt	1180	1	131	33.7	35.9
Actual	840	1	93	24	23.9
Total	3025	3	348	84	84.4

Table 22 illustrates the Pearson's product moment correlations and significance levels between the different levels of assault measured.

Table 22: Pearson's product moment correlations and significance levels for the three levels of assault measured (per month).

Type of assault		Threat	Attempt	Actual
Threat	Correlation Significance level(2-tailed)	1 -		
Attempt	Correlation Significance level(2-tailed)	0.649 0.0001	1 -	
Actual	Correlation Significance level(2-tailed)	0.655 0.001	0.842 0.001	1 -

As is illustrated above a significant relationship was found between all levels of assault measured.

7.3.2 Relationships between Staff Gender and Assault Levels

Table 23 illustrates the mean number of threatened assaults, attempted assaults, actual assaults and total assaults per month per staff member for both males and females calculated over a thirty-five month period.

Table 23: Mean number of threatened, attempted, actual and total assaults per month per staff member for both males and females.

Type of assault	Male		Female	
	Mean	S.D.	Mean	S.D.
Threat	7.04	6.3	9.84	7.8
Attempt	8.89	12.6	11.54	10.5
Actual	6.03	6.7	7.89	4.3

An unrelated t-test analysis revealed a significant difference between males and females both for threatened assaults ($t=2.103$, $df=34$, $p<0.05$) and

total assaults ($t=2.119$, $df=34$, $p<0.05$) with females having a higher mean per month for both of these categories. There were no significant differences between males and females however for attempted assault ($p=0.86$) or actual assault ($p=0.106$).

7.3.3 Relationship between Staff Qualification and Assault Levels

Table 24 illustrates the adjusted mean number of threatened assaults, attempted assaults, actual assaults and total assaults per month for both qualified and unqualified staff calculated over a thirty-five month period.

Table 24: Adjusted mean number of threatened assaults, attempted assaults, actual assaults and total assaults per month for qualified and unqualified nursing staff.

Type of assault	Qualified staff		Unqualified Staff	
	Mean	S.D.	Mean	S.D.
Threat	10.23	8.1	6.97	5.9
Attempt	12.9	14.4	7.78	6.9
Actual	8.66	6.3	5.34	3.1

Table 25 illustrates the significance levels found using an unrelated t-test analysis for each comparison made between assault and staff qualification.

Table 25: Significance levels found for each comparison between level of assault and staff qualification.

Type of assault	Value of t	d.f.	Level of significance (2-tailed)
Threat	2.84	34	$p<0.01$
Attempt	3.13	34	$p<0.005$
Actual	3.63	34	$p<0.001$
Total	3.69	34	$p<0.001$

As is illustrated above qualified staff experienced significantly more incidents of assaults than unqualified staff at all levels of assault measured.

7.3.4 Relationships between Staff Sickness Levels and Assault Levels

The present study found that the staff group in the specialist challenging behaviour unit experienced, on average, 134.1 threats of physical assault, 88.4 attempted assaults and 57.2 actual physical assaults per month over the eighteen months studied. Total sickness levels were found to be, on average, at 422.5 hours per month, with 68.4 hours for short-term sickness and 354.0 hours for long-term sickness.

The relationships between sickness levels and assault levels were examined using a Spearman's correlation. The results are recorded below in Table 26.

Table 26: Spearman's correlations between, and significance levels for, assault and sickness levels

Assault level	Spearman's rho	Short-term hours lost	Long-term hours lost	Total hours lost
Verbal	Correlation coefficient	0.255	-0.368	-0.307
	Sig. (2-tailed)	0.207	0.132	0.216
	N	18	18	18
Attempt	Correlation coefficient	-0.078	-0.141	-0.17
	Sig. (2-tailed)	0.760	0.576	0.499
	N	18	18	18
Actual	Correlation coefficient	0.158	-0.111	-0.061
	Sig. (2-tailed)	0.530	0.662	0.81
	N	18	18	18
Total	Correlation coefficient	0.156	-0.243	-0.199
	Sig. (2-tailed)	0.536	0.332	0.428
	N	18	18	18

No statistically significant relationships were found between sickness levels and assault levels.

7.4 Study 5: Discussion

Study 5 examined four aspects of assault in relation to staff working in a specialist health service unit. The discussion below relates to the first of these aspects, the relationship between threatened assaults, attempted assaults and actual assaults on the unit.

7.4.1 Relationships between Assault Levels

Previous research with individuals without a learning disability has suggested that verbal threats are an important precursor to physical aggression occurring (Maier, 1996) and that appropriate staff intervention at this stage can prevent physical aggression occurring. The first part of study 5 aimed to examine if verbal threats played a similar role for clients with learning disabilities. Firstly, it was found that a high number of assaults at all levels occurred on the unit in question, with the average number of actual assaults of 24 per month being double that found by Ghaziuddin and Ghaziuddin (1992) and well above the 8 per month found by Rowland and Treece (2000), in their study of a specialist in-patient unit for clients with challenging behaviour.

This may be attributable both to the characteristics of the client group, with individuals with a psychiatric disorder being more likely to assault (Ghaziuddin & Ghaziuddin, 1992) and to the environment. It is argued that the limited social opportunities that institutional environments may bring constrain the individuals and increase the importance of staff-client interactions in escalating or de-escalating violence (Black et al., 1997). The difference may also be attributable to the actual client numbers in each unit. Rowland and Treece (2000) report that their study examined the aggression displayed by four clients, but that only two were responsible for 88% of violent incidents. In contrast, study 5 involved five clients, all of

whom displayed severely challenging behaviour, including aggression. This would result in increased levels of recorded aggression as compared with other studies.

Study 5 found that a significant relationship existed between threats of assault, attempted assault and actual assault. This finding may be due to a number of factors. Firstly, while this relationship does not indicate causation, it may suggest that threats of assault should be taken seriously and as a possible indication that an attempted or actual assault may follow. The study did, however, find that there were fewer threats made than both attempted assaults or actual assaults. This may be because many of the assaults were impulsive (Berkowitz, 1983). An alternative explanation may be that, because, as noted previously, clients with learning disabilities are more likely to have difficulties in expressing their emotions appropriately, as well as communication difficulties (Department of Health, 1995), their needs or grievances may not be noticed or responded to by staff at an early stage (Holt, 1994). As a result the individual may already be in the crisis stage, where assaults are more likely to occur (Rowett and Breakwell, 1991) before staff notice. During this phase the individual becomes increasingly less responsive to staff intervention and increasingly likely to assault. As a result the assault may appear to have come 'out of the blue' with no verbal threat as a precursor. If this were the case, it would again suggest a need for broad-based training for staff to help them facilitate the appropriate emotional expression of clients with learning disabilities.

Despite a number of researchers highlighting the importance of adopting a broader, longer-term approach towards inappropriate anger, aggression and other forms of challenging behaviour (Black et al., 1997; Moore et al.,

1997; Clarke-Kehoe & Harris, 1992), such positive programming approaches are often neglected by both health and social care professionals (McKenzie et al., 1999b), therefore maintaining the reliance on short-term, reactive strategies.

In relation to the current staff team, however, all had received training in all three broad approaches to the management of challenging behaviour i.e. reactive strategies, including physical intervention, behavioural approaches and longer-term proactive approaches. However, the unit which was an adapted two floor cottage was identified as being far from ideal in terms of a suitable environment for the client group and has subsequently been relocated. It may, therefore, be that environmental constraints prevented effective approaches to challenging behaviour from being fully implemented.

A second explanation for the findings may be that, while threats of assault, attempted and actual assault are correlated, one is not a precursor to the other, but all three simply occur randomly in a unit where high overall levels of aggression occur. While all residents in the unit are known to both threaten and carry out aggressive acts, the recording method used in the study did not indicate which clients carried out which behaviour. It is therefore possible that one client made all of the threats of aggression, a different client attempted to carry out aggressive acts, while a third was successful in assaulting others. Further research would be required to clarify the exact nature of the relationship between threats and actual assaults, however, the results of study 5 indicate that this is an area which may merit further detailed investigation.

A third explanation for the finding may be that it simply reflects differences in staff perception. The subjective nature of the definition of assault (Arnetz et al., 1996) may mean that staff were less likely to record threatened assaults because they did not perceive them as being as serious as attempted or actual assault. However, the participating staff group had been closely involved in designing and implementing the recording sheets to ensure that they reflected as accurately as possible their experiences of assault in the unit. It would therefore seem unlikely that they would fail to record a particular category of assault i.e. threats, that they themselves had identified as important. Flannery et al. (1994) also found that verbal abuse and threats were perceived as distressing and frightening for staff as well as actual assaults.

Study 5 also found that staff successfully intervened on average in thirty-three cases of attempted assault each month, indicating that, in the majority of cases, they are picking up on cues that suggest that an assault is about to occur. These cues may, however, be occurring somewhat later in the assault process, when physical aggression and some form of physical intervention become increasingly inevitable. Many staff working with clients with learning disabilities have emphasised the importance of reactive strategies in ensuring client safety (McKenzie et al., 1999b). If the first interpretation of the results of study 5 is correct, it suggests that a client's verbal threat of assault may be a strong cue to staff of the need to intervene before an actual assault takes place, but that such an indicator may not always be present or picked up by staff.

The first part of study 5 does, however, have a number of limitations. As noted above the definition of aggression can be subjective and this may have effected what staff did and did not record. However, given that staff

agreed the categories used and recorded high levels of assault over a long period, this would suggest that the staff were committed to maintaining accurate records. The second limitation relates to the specificity of the findings. The results refer to only one in-patient unit. It may be that the results would differ in community homes or in other services. Further research in such services would be required to clarify this issue. Thirdly, as was noted above, the recording method used did not note which behaviours were displayed by which client.

In summary, the first part of study 5 found a significant association between threats of assault, attempted assaults and actual assaults in an in-patient health service provision for individuals with a learning disability. One explanation is that threats may serve as an early indication that assault may occur, although more research would be required to clarify the exact nature of this relationship.

7.4.2 Relationships between Staff gender and Assault Levels

The second aim of study 5 was to examine if a relationship existed between the gender of staff and their experience of different levels of assault. It was found, as noted above, that the staff working on the unit experienced high levels of threatened, attempted and actual assault. The actual number of assaults per year of 279, can be compared with the figure of 145 assaults over a one year period in a one hundred bedded institution for people with learning disabilities found by Ghaziuddin and Ghaziuddin (1992). Clear gender differences in relation to experience of assault were also found, with women having higher recorded levels of threatened assaults, attempted assaults and actual assaults than men. In addition, both threatened assaults and total assaults were found to be significantly higher than that experienced by men.

A similar result was found in study 4, with women working in community settings being more likely than men to report experiencing all forms of aggression, with the exception of destructive behaviour. In addition, the women were significantly more likely to have experienced verbal aggression than men.

The finding in the second part of study 5 may be due to a number of factors which may also underpin the results found in study 4. Previous research has suggested that men and women may interact differently with patients, for example that women use more verbal de-escalation techniques rather than active restraint (Flannery et al., 1994) and that this can have different associated risks of assault (Carmel & Hunter, 1991, Levy & Harticollis, 1976). Both the male and female staff in the present study had received training in the management of aggression and violence including de-escalation techniques and recognised methods of physical intervention. There may, however, be differences in the way that such training is applied by men and women. Study 4 indicated that while more men who have received training report being confident in managing aggression, this does not hold for women who have received training. It may be that this lack of confidence impacts on the way that women implement their training. Observational studies of the staff in practise would be required to clarify this further.

As was noted in relation to study 4, the findings of the present study may not be associated with gender per se, but rather features associated with gender such as size, height and strength. Hastings et al. (1997) suggest that factors such as physical build may relate both to emotional responses of staff to, and attributions about, aggression as well as being related to the ability to exert control. Similarly, clients may act on the basis of

physical characteristics of staff. For example, clients may be more inclined to threaten and assault staff who have less physical presence than those who appear physically strong, regardless of the actual ability of staff to manage aggression. On the whole women are smaller and lighter than men and may therefore appear an easier target. A more detailed examination of the relationship between such specific characteristics in staff members and assault may shed more light on this area.

A further reason for the findings of the present study may relate to differences in recording methods and the subjective way in which aggression can be perceived (Arnetz et al., 1996) as noted above. Recent research has indicated that males working in a psychiatric setting are more likely to see assaults as an inevitable part of their job (Poster & Ryan, 1994) and that males overall in a study of workplace assault hold attitudes that are more blaming of victims of assault (McKenzie et al., 2000b). It may be that gender differences in the attitudes that staff hold towards assault effect whether they perceive a situation as a threatened, attempted or actual assault and in turn effect the likelihood of this being recorded.

In summary, the second part of study 5 found high levels of assault in an in-patient unit for individuals with learning disabilities and severely challenging behaviour. Women were found to experience significantly higher levels of threatened and total assault than men. The results of both studies 4 and 5 would, therefore, suggest that gender plays a differential role in the experience of aggression. The importance of determining exactly what the nature of this relationship may be is highlighted, not only by the fact that the experience of aggression clearly has detrimental effects on any individual, but that assaults on women cost more in terms of human suffering and medical expenses (Hunter & Carmel, 1992).

However, a number of other factors have been identified in psychiatric services which also appear to contribute to the likelihood of assault occurring. These include the nature of the relationship between clients and staff (Binder & McNeil, 1994), training in aggression management techniques (Rosenthal et al., 1992) and patient/staff ratio (Lanza et al., 1991). While the applicability and relevance of these findings have yet to be established for learning disability services, the research carried out in psychiatric settings would warn against emphasising any one single factor, such as gender, as paramount in understanding aggression. The third aim of study 5 was to examine the role of another factor, staff qualification, in the experience of aggression.

7.4.3 Relationships between Staff Qualification and Assault Levels

The third part of study 5 focused on examining the relationship between staff qualification and the experience of aggression. It was found that qualified staff were significantly more likely to experience threatened assaults, attempted assaults and actual assaults than non-qualified staff.

This finding may appear initially puzzling, as it may be assumed that qualified staff, through their training would have greater knowledge, skills and competence in dealing with assaults than unqualified staff. However, the results may be due to a number of factors. It has been noted in psychiatric settings that assaults are more likely to occur during certain routine nursing tasks, in particular the administration of medicines (Cooper & Mendonca, 1991). Coupled with this is the finding that individuals with an associated mental illness are significantly more likely to assault (Ghaziuddin & Ghaziuddin, 1992). All of the clients in the unit were receiving medication for the treatment of mental health difficulties. In health service facilities, only the qualified nursing staff can administer

medication. This factor alone may place them at an increased risk for experiencing assault.

It has also been argued that assault is more common in situations where the patient perceives his/her wishes as being thwarted (Cooper & Mendonca, 1991) or where limits must be set on individuals' behaviour (Binder & McNeil, 1994). It is probable that qualified nursing staff will be perceived as having more authority than non-qualified staff when it comes to negotiating client requests. Given their greater levels of training and expertise, qualified staff would be more likely to be expected to intervene in difficult situations. Similarly, the unqualified staff member may seek a decision from qualified staff in relation to such requests. This may result in qualified staff again being placed in situations where conflict and assault is more likely to occur.

A third possible explanation may be that the role of the qualified staff is more wide-ranging than that of unqualified staff, including administration, attending meetings, communication with families and service development. As a result they may spend less time on the unit interacting with the clients and therefore be less able to pick up cues that an individual has a grievance. This may result in their experiencing an increased number of incidents of aggression.

However, a further reason for the findings, shared with the previous two studies, may relate to the recording methods used. While the categories of assault were agreed by all nursing staff, it may be that the staff differed in what they perceived and recorded as assault. Many nurses have been found to blame themselves for assault (Ryan & Poster, 1989). It may be that unqualified staff feel that to be a victim of assault reflects badly on

their competence and they may subsequently be less prepared to record it than qualified staff.

7.4.4 Relationships between Staff Sickness Levels and Assault Levels

The final aim of study 5 was to examine the relationship between staff experiences of assault and staff sickness levels, the latter being used as an indicator of staff 'burn-out'. Previous studies have indicated that the risk of exposure to violence has been found to be related to high levels of staff burn-out (Attwood & Joachim, 1994). Flannery et al. (1994) also found that verbal abuse and threats were perceived as distressing and frightening for staff as well as actual assaults. It has been established above that the present staff group experienced high levels of threatened assaults, attempted assaults and actual assaults. Despite this, no significant relationships were found between assault levels and staff sickness levels in this study. This finding is inconsistent with other studies which have found a relationship between absenteeism and factors considered to be detrimental to staff morale (Bromley & Emerson, 1995; Attwood and Joachim, 1994).

A number of factors may be contributing to this finding. Previous research has found that one of the main stressors for staff relates to the lack of knowledge about the causes of the challenging behaviour and strategies to reduce it (Bromley & Emerson, 1995). Given the specialist and skilled nature of the staff working in this particular unit, and ongoing input and support from other members of the community team for people with learning disabilities, it is likely that staff felt both aware of the function of the behaviour and of strategies in place to manage it. If this were the case, a major stressor would be removed.

An additional factor relates to the relationships between the staff working in the unit. Rose (1997) suggests a model for staff stress whereby inter-staff relationships act as a social buffer for stress. The requirement for staff in a specialist challenging behaviour unit to work in close co-operation and have trust in each other in relation to physical safety (i.e. carrying out control and restraint techniques) may act to reduce stress.

Staff, in responding to actual physical assaults and attempted assaults, have to take charge and control the situation. In contrast, a verbal threat of physical assault may bring anxiety and uncertainty to staff about if and when the threat may be acted upon, removing the feeling of control from the staff. Such unpredictability has also been found to be a significant source of stress for staff working with individuals with challenging behaviour (Bromley & Emerson, 1995). The finding that a lack of control over aspects of their work can also cause stress for staff has also been demonstrated by Sharrad (1992). However, no such relationships were found in this study. This is again inconsistent with Lawson and O'Brien's (1994) study which found a relationship between days absent and negative social interaction with clients. The staff team in question would need to be an interacting group i.e. the members are interdependent and they need to co-operate and co-ordinate to achieve their goals (Fiedler, 1967). One could speculate that the positive practices used in the unit and the strong working relationships between staff necessary for this to be possible may have indeed acted as something of a 'stress buffer' as suggested in Rose's (1997) model.

Work by Rose et al. (1997) has also identified that certain aspects of the team climate, such as support for innovation and emphasis on high quality service provision are related to lower levels of stress, anxiety and

depression. The staff team studied worked within a climate where individual innovation, suggestions and ideas were welcomed and supported. In addition, the team embraced the idea of evidence-based practice and evaluated and appraised the service on a regular basis to ensure a high quality service. This is reflected in study 6, which follows the impact of the in-service patient staff team proposing a change in the way the service is provided, after receiving feedback of the results of study 5.

The final part of study 5 does, however, have a number of potential limitations, the first of which has been previously outlined. While an attempt was made to improve the reliability of the recording methods by the use of pre-printed forms and agreed definitions of the categories of assault levels, it is acknowledged that the definition of what constitutes an assault can be subjective (Arnetz et al., 1996). Attitudes towards assault can also vary depending on a number of factors including previous experience of assault and gender (Poster & Ryan, 1994). It may be that such differences among the staff group led to differences both in what was recorded as assault and the stress staff may have felt as a result.

A second limitation relates to the use of absenteeism as a measure of stress and burn-out. While absenteeism is commonly reported as one factor related to stress and burnout (Lawson & O'Brien, 1994), the current study did not include any independent or self-reported measures of staff stress. Thus, it is possible that stress-related staff absenteeism may have been present in the unit but not necessarily in a form measured by this study. However, it is increasingly being recognised by researchers that direct observation/measures of behaviour may be more informative in relation to staff stress than more traditional self-report measures (Lawson & O'Brien,

1994) with a lack of research demonstrating that self report measures of stress correspond to the presence or absence of the phenomena. The emphasis has, therefore, shifted to the evaluation of more objective indicators of stress (Maslach & Jackson, 1986; Lawson & O'Brien, 1994), such as actual absences from work.

In summary, the final part of study 5 indicated, that while the staff in question clearly experienced high and ongoing levels of threatened assaults, attempted assaults and actual assaults, no relationship was found between these factors and absenteeism. It was suggested that this may have been as a result of the close working relationships of staff, levels of specialist knowledge and trusting inter-personal relationships.

The results of study 5 also suggests that, while interventions based on behavioural and cognitive models of aggression in people with a learning disability can be effective (Lindsay, 2001), the application of these interventions by highly trained staff can still fail to prevent high levels of aggression occurring. Study 5 has indicated some of the many factors that may influence the expression of aggression by people with a learning disability. It is also probable that the mental health problems, communication difficulties and intellectual impairments of the client group contributed significantly to the high levels of aggression.

Recent work has suggested a role for neurotransmitters in aggression in people with a learning disability (Schroeder & Tessel, 1994). Aggression, has also been found to be more common in people with a learning disability and associated mental illness (Fraser & Nolan, 1994; Bouras et al., 1988). This suggests the need for a multi-disciplinary approach to aggression, with each profession contributing towards a multi-component

approach. Study 1 indicated that professions such as psychiatry were not always part of community learning disability teams and study 2 suggested that team members did not always work jointly with other professions.

The literature discussed, and results of all of the studies in the thesis suggest that the type, structure and organisation of services to people with a learning disability, as well as individual factors of both the clients and the staff who support them can be crucial to the provision of a safe and effective service. Study 6 examines the impact of a proposed service change for people with challenging behaviour on both health and social care staff

Chapter eight

8.1 Study 6: Changing Service Provision for Clients with Severely Challenging Behaviour - Introduction

Study 3 indicated that a common reason for referrals being made to health staff working in learning disability services is aggression. As was outlined in studies 3, 4 and 5, responses to referrals relating to aggression may range from input from local community learning disability teams to specialist in-patient units.

Study 5 related to those clients whose current behaviour could not be managed in community settings, and so the in-patient assessment/treatment units offered an alternative (Scottish Executive, 2000). Interventions used in in-patient units have been shown to be effective (Gaskell et al., 1995) and to lead to clients being returned to their community placements. A number of advantages of secure units have also been outlined, including the ability to provide a therapeutic environment in terms of clear boundaries and expectations, structure and predictability, and team approaches (Turner, 1998). In addition, they have been identified as a means of providing protection to others, presenting a short term solution to acute problems, acting as a centre of excellence and providing confidence to other services who know that specialist facilities are available if required (McBrien, 1987).

However, study 5 indicated that high levels of aggression continued to be displayed by clients over relatively long periods of time, suggesting that successful interventions are not always achieved quickly. There have also been a number of other criticisms of such units. These include the real concern that behaviours are not being addressed in the environments in

which they occur, that the existence of the unit may prevent the development of skills in local services and that grouping people with difficulties together may actually compound their problems (McBrien, 1987; Emerson et al., 1987). It is also argued that providing intensive support in the community can be a cost-effective model for managing challenging behaviour (Allen & Lowe, 1995). These factors have increasingly led service providers to question the effectiveness of providing unit-based services, and to examine the benefits of community based services (Dixon, 2000).

There has, however, been little research examining the views of staff whose skills are transferred from unit based to community services or about the views of social/independent care providers with whom the responsibility for the majority of residential care for people with a learning disability is now placed. Discussion of planned changes has been identified as a means of promoting open communication and trust between individuals whilst helping to redefine and clarify professional roles (Tappen, 1995). However, while the reason for the need for change should already have been established, there may still be staff resistance as change can be perceived as threatening in itself (Glynn & Perkins, 1995) and threatened self-interest may result in the changes being undermined (New & Couillard, 1981).

Such potential barriers can be avoided by all staff being consulted about the process (Willmot, 1998) and if there is a recognition that the changes are likely to improve the service (Prymachuk, 1996).

Changing working practices often leads to changes within the working group. Research suggests that any newly established group or team

evolves through five recognisable stages (Tuckman, 1965 as cited in Blair, 1995): forming, storming, norming, performing and adjourning. During the forming stage team members are identified. The storming phase begins as individuals work out their place in the team. At this point conflict is likely to arise, and the way forward for the team may be unclear.

Throughout both of these initial stages there is a need for support for the team and it can be beneficial if members are aware that these processes are a part of team development. If the team is able to progress beyond the storming stage, the norming stage marks the beginning of shared goals and effective team work. Challenges and targets would be identified as the team began to perform. While it would not be expected that the team as a whole would adjourn, the process may begin again as individual team members leave and are replaced.

Overcoming barriers to change

There are, however, a number of barriers to progressing through these team development stages. Such barriers include a lack of knowledge about the roles of individual team members (Tappen, 1995). Similarly, a lack of experience and knowledge can lead to conflict becoming personalised (McPhail, 1997). Progression through the storming phase can also be arduous if there is a communication break-down within the team. This can lead to organisational confusion as the skills and knowledge of staff are under-utilised. Work may be duplicated, wasting time and resources and a lack of overall co-ordination may result in the team being inefficient and ineffective (Greig & Peck, 1997).

To maximise the potential for change which exists in any organisation (Tappen, 1995) there is a requirement to: provide a clear rationale for the need for change and identify the areas of practice that require to be

changed (Hill & Leiper, 1992). In terms of the rationale for change, it is acknowledged that in-service provision for people with a learning disability and challenging behaviour has a number of disadvantages. Furthermore, the clients can present with a range of multiple and complex needs and therefore co-ordinated and co-operative services are in the best interests of the client (Barr, 1993). Study 6, therefore, aims to survey the views of health and independent sector staff about a proposed change to the unit based challenging behaviour assessment/treatment model outlined in study 5 for clients with a learning disability and severely challenging behaviour.

8.2 Study 6: Method

The Proposed Service Change: This was to reduce the existing in-patient unit, as is described in study 5, and develop a community outreach service. The use of the 2 in-patient emergency beds would be reduced and the unit staff would instead assess and treat newly referred clients in their home environments. There was no planned reduction in bed availability as it was considered important to still have emergency in-patient assessment as an option, if required.

Rationale for change

It was felt that this model would have the following : behaviours would be addressed in the environment in which they occurred; collaborative working and skill sharing between health and independent services would be promoted; clients with challenging behaviour would not be grouped together.

Participants

Two groups participated. Group 1(n=7) were qualified nursing staff, all of whom had worked in the unit for at least 2 years. Three were male and 4 were female with a mean age was 35.43 (SD = 8.79). Group 2 were representatives independent sector care organisations that provided services to clients with a learning disability.

Procedure

The service proposal was initially planned by a small working group consisting of the unit manager and community learning disability team members. This was formalised and developed into a presentation with the following format: A brief history of the service; Current service provision - referral routes, admission rates, staffing levels, treatment models, input from other professionals, service liaison procedures; Proposal for new service- working practices, staffing levels, referral routes, treatment methods, accountability, service liaison procedures; Questions and discussion. In addition, a brief questionnaire was developed to examine participants' views about the proposed service change. The questionnaire asked the following :

- Name of organisation
- What do you think are the advantages of the proposed outreach service?
- What do you think are the disadvantages of the proposed outreach service?
- Any additional comments?

The presentations were given by the unit manager and one other community learning disability team member. Group 1 received this at a team meeting. All staff (n=7) then completed and returned the questionnaire. The same presentation was also given separately to the 14 independent sector providers and between 5 and 12 staff from each organisation attended. The questionnaire was then completed by each independent sector manager, following discussion with the staff and returned by post to the clinical psychologist for collation and analysis. All 14 questionnaires were returned, giving a 100% response rate. Responses were simply categorised on the basis of being 'advantages' i.e. benefits of the proposal, or 'disadvantages' i.e. drawbacks to the proposal. Other

comments, for example, a question relating to a specific client, were excluded from the analysis and dealt with by the appropriate person.

8.3 Study 6: Results

Table 26 shows the number and percentage of staff in each group identifying each category in relation to the advantages and disadvantages of the outreach service.

Table 26: The number and percentage of Group 1 and Group 2 staff identifying each category in relation to the advantages and disadvantages of the outreach service.

Views	Group 1 (n=7)		Group 2 (n=14)	
	Number	Percent.	Number	Percent.
Advantages				
More valid assessments carried out in situ	4	57	6	43
Less disruption to clients	5	71	1	7
Opportunity to increase skills/experience	3	43	4	29
More flexible service	2	29	2	14
Easier contact with services/carers/families	2	29	9	64
Increased staff collaboration across agencies	0	0	5	36
More direct treatment in situ	0	0	3	21
Awareness of community issues for unit staff	0	0	5	36
Disadvantages				
Isolation from peer group	4	57	0	0
Less 24 hour observation	1	14	0	0
More reliance of views of untrained staff	2	29	0	0
Impact of other service users in situ	0	0	3	21
Need to adjust to new ways of working	0	0	2	14
Staff may feel threatened by being observed	0	0	7	50

8.4 Study 6: Discussion

Study 6 examined the views of two groups of staff in relation to a proposed service change. The most frequently identified advantage for the unit nursing staff was the reduced disruption to clients' lives caused by admission to the in-patient unit. This factor has been identified as contributing to the psychological and behavioural disturbance of service users (Van Minnen & Hoogduin, 1998). For independent sector provider representatives the most frequently cited advantage was easier contact with health services, carers and families. Twenty nine percent of the unit staff also identified this as an advantage. Research suggests that the way others react can influence the likelihood of success of interventions aimed at treating challenging behaviour (Hastings et al., 1995). Better contact between health and independent sector staff may lead to improved communication and more opportunities for staff to model appropriate approaches to challenging behaviour in the situations in which they are known to occur.

Both groups frequently identified the advantage that assessments would be more valid as they would be carried out in the service user's normal environment. Previous criticisms of unit-based interventions have centred around the failure of interventions to generalise or transfer to the community setting once the service user has been discharged, and the inherent lack of validity in an assessment in an unusual environment carried out by staff with different skill levels and approaches (McBrien, 1987). Both groups also saw the opportunity to increase skills and knowledge as a major advantage. Recent policy documents have highlighted the need for collaboration and joint working to facilitate good quality services (Department of Health, 1993; Scottish Executive, 2000).

In terms of disadvantages, both groups tended to see things more from their own positions. The unit staff expressed some concern about a possible lack of peer support when working in community settings and being more isolated from their familiar staff grouping. Previous research has suggested the importance of peer support in acting as a buffer against stress for staff working in learning disability services (Rose and Schelewa-Davis, 1997). Study 5 indicated that this factor may have been particularly important for the staff team working in the unit.

Independent sector staff expressed some concern that their involvement in assessments and being observed by health staff might make them feel 'threatened'. Both sets of views represent a degree of uncertainty about how people operate across service boundaries. This highlighted the need for further work in order that the transitions for staff could be made more easily. These views also prompted a need to look more closely at philosophies of care and working practices across service settings in order to ensure compatibility.

Independent sector staff also felt that it would be difficult to adjust to new ways of working and one organisation suggested that the main priority was to set up a system of regular updates as to the progress of the proposed change in service delivery. Change can be threatening in itself and can produce resistance in staff (Glynne and Perkins, 1995). One means of easing this is to involve those who will be affected by the process. This has been identified as a means of enhancing feelings of staff ownership and involvement in the process of change (Willmot, 1998).

The study had a number of methodological limitations. Firstly, unqualified unit staff and some of the community learning disability team members

were not included at the early planning stage. This was because it was not proposed that they would be directly involved in the new outreach service. Research by Tuckman (1965 as cited in Blair, 1995), however, suggests that changes within a team can impact on all members of that team. In addition, failure to consult all staff can lead to the proposed changes being undermined as staff may feel that their own position is threatened (Willmot, 1998, New & Couillard, 1981). It may, therefore, have been more appropriate to involve all health staff in discussions at an earlier stage.

Secondly, the presentation about the proposed move was carried out separately for nursing staff and the different independent sector staff groups. A joint presentation where all staff could have shared and discussed their views directly may have resulted in a different picture. This was initially attempted. Unfortunately, the practicalities involved in bringing all groups together at the same time proved difficult.

In conclusion, study 6 suggests that, on balance, views about the proposed service change were favourable across both staff groups with more advantages than disadvantages being identified. The study clearly identified areas for further staff training, joint discussion and service planning and demonstrates the need to involve those on whom service changes will have an impact in the process.

Chapter nine

9.1 Methodological Limitations

A number of potential methodological limitations were highlighted throughout the thesis in relation to studies 1-6. These will be discussed in more detail below. One particular limitation was the fact that the participants in studies 4 and 5 may have had differing definitions of what constituted aggression, and as a result, may have differed in what they recorded. These studies relied on participants' reports in relation to aggression. As such, there was a need for the accurate measurement of the concept of aggression. Tierney et al., (1988) note that valid measurement in research is required to ensure 'a degree of precision and objectivity' (p55). In addition, the development and testing of theories about any given concept requires valid measurement of that concept (Nolan & Behi, 1995).

Aggression is noted to be a concept which can be open to subjective interpretation. What one individual defines as aggression may differ from that of another depending on individual experiences, attributions and knowledge (Arnetz et al., 1996). The need to produce measures of more subjective and abstract concepts such as aggression is common in psychological research (Bear, 1990; Nolan & Behi, 1995). The process has been referred to as operationalisation (Polit & Hungler, 1991; Burns & Grove, 1993), and involves the following stages: identifying and defining the concept in question and devising indicators (Dempsey and Dempsey, 1992).

The staff in study 5 were involved in each stage of this process and developed a shared understanding, definition and indicator of the concept of aggression. It is hoped that this process reduced the possibility of

participants recording aggression in different ways thus reducing the validity and reliability of the results. However, the indicator of aggression may be open to criticisms itself. A specially designed form was used in study 5, as illustrated in appendix 2. Previous researchers have, however, criticised the use of incident form methodologies as a means of studying aggression. Criticisms include the following: that the forms may not be completed at the time of the incident, thus reducing reliability; that they may not be completed by the person involved in the incident and that they may only be completed for more serious incidents e.g. when injury has occurred (Drinkwater, 1982).

There is the possibility that the above factors reduced the reliability and validity of the recording method used in the thesis, particularly in study 5. An attempt was made to address all of the above factors, however, by ensuring that the forms were quick and easy to complete and they could, therefore, be completed immediately after an incident and by involving all staff in the design process. This was intended to ensure they took responsibility for recording the incidents they were personally involved in, and that they included all forms of aggression which met the agreed criteria.

The fact that each staff member recorded their own incident, however, raises a further methodological problem. This was necessary, not only for the reasons outlined above, but also in order to determine the effect of factors such as gender and qualifications on the experience of aggression. This obviously meant that the results were not anonymous and raises the possibility that this may have effected staff recording. Eddie (1994) notes that, under circumstances where data is not anonymous, the guarantee of confidentiality is essential i.e. the data will be used in such a way that

no-one but the researcher will know the source. All staff were assured of confidentiality, and their involvement in the design of the measure ensured that this issue was raised and discussed. Indeed, the staff are required as part of their job to complete and sign incident forms in relation to their involvement in aggressive incidents. Despite these precautions, however, the possibility that staff responses in study 5 were influenced by the lack of anonymity can not be discounted.

Participants in study 4 were not involved in the research process in the same way as participants in study 5. Rather the staff were given an open-ended question and the responses were subsequently coded by two raters into categories i.e. verbal, physical, destructive and other. It was posited that staff may not have recorded less serious forms of aggression e.g. threats, as a result of this system. However, 44% of staff in study 4 recorded some form of verbal aggression towards them, suggesting that this type of aggression was not overlooked.

In addition, however, staff in study 4 were not required to give the frequency or severity of the aggression they had experienced. These factors are likely to have had some importance in influencing staff approaches, perceived training needs and confidence, but were not recorded. Unfortunately, however the time involved in requesting 50 staff members to keep a detailed note of the frequency and severity of the type of aggression they experienced made it was impractical. This was remedied in study 5, however, where detailed records were kept by the smaller staff team over a 35 month period in relation to severity and frequency of behaviour.

A further limitation relates to the fact that studies 1, 4 and 6 were based on responses to either a semi-structured interview based on set questions or coded responses. Questionnaire design requires that the tool meet a number of criteria including validity, reliability and objectivity (Eby, 1993; Dickens & Stallard, 1987).

The concept of validity can take a number of different forms, but essentially asks if the tool measures what it set out to measure. These different forms include: face validity, i.e. the extent to which it appears to measure what it sets out to; content validity, i.e. the extent to which the items are representative of the concepts being measured; criterion validity, i.e. the extent to which the items are comparable to a similar measure; discriminant validity, i.e. the ability of the measure to discriminate between groups and face validity, i.e. the extent to which the measure covers areas of importance to the reference group to which it is being applied (Eby, 1993)

The questionnaire used in study 4 appeared to have face validity in that staff understood it and completed it correctly. The content validity of the questionnaire was addressed by relating each questionnaire item to previous research that indicated its importance to the area of aggression e.g. that staff working in learning disability services are at risk of being assaulted (McKenzie et al., 2000b; Borthwick-Duffy, 1994), that factors such as experience, gender and training have been found to be related to the experience of aggression (Flannery et al., 1994; Arnetz et al., 1996; Rosenthal et al., 1992) and that staff have been found to experience aggression as aversive and stressful (Attwood & Joachim, 1994; Spreat et al., 1986).

The criterion validity of the questionnaire was not addressed as it was not designed to measure a unitary concept, rather factors which related to aggression. Similarly the discriminant validity of the questionnaire was not examined. Future research could, however, utilise the questionnaire with staff who do not work within learning disabilities services to examine if the measure yields distinct results for the two different groups.

Finally, the social validity of the questionnaire was addressed as the author was aware from his clinical experience that the participants supported clients with a learning disability, many of whom also displayed aggression. The concept of aggression and related issues were, therefore, salient to the participants.

A number of different forms of reliability also exist. These include: inter-rater reliability, i.e. the extent of agreement between two raters, test-retest reliability, i.e. the extent to which the same responses are achieved at a different point in time or under different circumstances, internal consistency, i.e. the items are homogeneous and alternate forms, i.e. the extent of agreement between two forms which measure the same thing.

The latter two forms of reliability are not relevant to the present thesis, as the questionnaire was not designed to measure a unitary concept. The inter-rater reliability of the questionnaire used in study 4 was examined by having two raters code 68% of responses. Acceptable levels of inter-rater reliability were found for all items. Practical restraints, such as participant time, and the need to ensure anonymity of responses meant that the test-retest reliability of the questionnaire used in study 4 could not be

examined. It is therefore possible that participants responses may have changed on re-administration of the questionnaire, indicating unreliability.

Objectivity refers to the need for the measure to be as unbiased as possible. This was addressed in four ways: by ensuring that questions related to previous research finding as outlined above; by involving the participants in study 5 in the process; by establishing the face validity of the measures, i.e. the questions appeared reasonable, and by ensuring that the author had no vested interest in any particular outcome of the study, and was therefore unlikely to be biased in the questionnaire design.

Despite all of the above precautions, however, research suggests that small changes in the phrasing, order and structure of questions can lead to differing responses (Gaskell et al., 1993). This can impact on responses to written questionnaires as well as to interviews and the results of study 1 and studies 4, 5 and 6 would, therefore, also have been vulnerable to this limitation. This effect can be lessened by reducing the number of response alternatives and intensifiers. The questions used in both of the interview studies and the questionnaires used in study 4 predominantly used open-ended questions with no intensifiers, and where individuals were given options this related to factual information e.g. gender, which is less likely to be unreliable (Gaskell et al., 1993). However, the possibility that the questionnaire used was not valid or reliable can not be completely discounted.

A further limitation of some of the studies relates to sample size. Work by Cohen (1992) outlines the minimum sample size required to ensure that any given analysis has sufficient statistical power. Study 4 involved 50 participants, however, subsequent analyses, e.g. relating to gender and

training, involved smaller numbers. The lack of significant results in relation to some of these analyses may be due to insufficient statistical power. It would clearly have been preferable to have larger sample sizes for these analyses, however, practical time constraints prevented this. In addition, to ensure sufficient numbers for each factor would have required choosing a non-randomised sample, which in itself brings methodological problems. The thesis, in fact, did find a number of significant results indicating that the sample size was sufficient for the predicted effect size for those factors being examined.

The sample size in relation to study 1, 2, and study 6 were necessarily small as they were limited by the number of existing NHS trusts, team members and social care staff effected by the proposed service change respectively. These studies did not therefore employ statistical analysis to avoid making a Type II error i.e. accepting the null hypothesis when it is false. The aims of the studies were not, however, compromised by this as they were predominantly to establish broad patterns of service provision and staff opinion rather than establish statistical comparisons.

9.2 Conclusions

The thesis had a number of aims both in relation to establishing a snapshot of service provision for people with a learning disability in general and in particular to those who displayed challenging behaviour. Secondly, having established a context within which services were provided it aimed to examine staff experiences of aggression in both community and specialist health services for people with learning disabilities.

The thesis found that not all services in Scotland had the full range of professions that may be expected to play a role in relation to the provision

of services to clients in general and to those with challenging behaviour in particular. However, all of the trusts did have input from clinical psychology, the main profession which traditionally is seen as having a remit in relation to challenging behaviour. Study 2 indicated that different professions have quite different work patterns within the same team. The study also raised the question of whether important aspects of team work such as joint working, consultancy and training may not be reflected in traditional recording systems. Finally, study 3 illustrated that aggression was the most common reason for referral to one community clinical psychology service.

Studies 4 and 5 of the thesis established that, despite the existence of specialist services a high percentage of both social care and health staff continue to experience aggression as part of their work, the most common form being attempted or actual physical aggression. No clear relationship was found between training and either the experience of aggression or confidence in managing aggression for the social care group. Gender appeared to play a mediating role in relation to training, with trained women being significantly more likely to report anxiety in managing aggression than trained men.

The thesis also indicated that gender differences exist in relation to the experience of assault, both in social care and health settings, with women being more likely to report experiencing aggression. Whether these differences relate to gender per se or associated factors such as physical size, strength or levels of confidence require to be investigated further.

Another factor, staff qualification, was implicated in the differential experience of aggression, with qualified staff being at greater risk of

experiencing aggression. Again more detailed work is required to determine whether this relates to the differing skill and knowledge levels of the staff groups or to the different roles that qualified and unqualified staff carry out. It was also found that, despite staff experiencing high levels of aggression, this did not relate to burn-out, as measured by absenteeism. This was thought to be related to the specialist nature of the service, aspects of the team climate and the strong, positive working relationships between staff acting as a 'stress buffer'.

The thesis also found a relationship between threats, attempted and actual aggression. The exact link between the three remains to be established. One explanation was that verbal threats of aggression may be an important warning that a physical assault may follow but that staff may be required to 'tune in' to earlier cues that the client has a grievance.

The successful reduction of aggression in clients with a learning disability brings services closer to meeting the 'five accomplishments' outlined by Tyne and O'Brien (1981). It also brings benefits for the families and carers of such clients. Overall, however, the thesis indicated that staff in both social care and community settings continue to experience aggression. Social care staff would appear to lack training in the successful management of this behaviour in community settings, with the majority reporting a need for further training. Specialist health staff, despite their training, continue to experience high levels of aggression. The thesis has suggested a number of factors that may contribute to this which may merit further research.

Finally, study 6 of the thesis indicated that both health and social care staff overall, saw advantages in moving from an inpatient model of care for

those with severely challenging behaviour towards a more collaborative community outreach service. However, over half of the health team were concerned that the change would lead to a loss of peer support. This factor had been hypothesised as helping to prevent burn out in a staff team working in an environment that placed them at a high risk of being assaulted. Study 6 suggests that the next challenge for services for people with severe challenging behaviour is to marry the advantages of a community based outreach service with the peer support and expertise that appear central to alleviating stress and burn-out.

In summary, services for people with a learning disability have changed markedly over the years. By definition clients require some level of support and some may require intensive levels of support. The thesis suggests that there remains a need for an adequately resourced, trained and skilled workforce to provide high quality services, particularly in relation to aggression. Behavioural and cognitive models help explain this behaviour in people with a learning disability and offer pragmatic clinical approaches which have been shown to be successful (Lindsay, 2001). However, previous research and the present thesis suggests that these approaches may not be available to the vast majority of social care staff (Emerson et al. 2000) and that where staff are trained and skilled in their use other factors can play a role. The thesis highlights a number of areas for future research in this area. The publications from the thesis are shown in Appendix 3.

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Appendix 1: Study 4: Questionnaire and Scoring Criteria for Staff Questionnaire

(1) How long have you worked with people with learning disabilities?

Options:

- (i) up to 1 year
- (ii) 1-5 years
- (iii) 5-10 years
- (iv) over 10 years

(2a) Do you experience aggression and violence at work?

Options:

- (i) yes
- (ii) no

(2b) If yes, please describe.

Category options and examples of responses are recorded in Table 1:

Table 1. Category options and example of responses illustrating the types of aggression and violence experienced by staff at work

Options	Examples of responses
Verbal	Shouting/Swearing
Physical	Slapping/hair-pulling/pushing/head-b utting/punching/kicking/biting
Destructive	Banging doors/throwing things/breaking objects
Other	Spitting/Gesturing/self-injury

(3) How do you feel about dealing with incidents of an aggressive and violent nature?

Category options and examples of responses are recorded in Table 2:

Table 2. Category options and examples of responses to how staff feel about dealing with incidents of an aggressive and violent nature

Options	Examples of responses
Anxious	Apprehensive/nervous/tense/afraid
Confident	Unconcerned/comfortable/no problem

(4) What are your main worries/concerns about dealing with incidents of an aggressive and violent nature?

Category options and examples of responses are recorded in Table 3:

Table 3. Category options and examples of responses to the main concerns/worries of staff about dealing with incidents of an aggressive and violent nature

Options	Examples of responses
Injury to self	Getting hurt/being hit/personal
Injury to colleagues	Others being hurt/staff being
Injury to clients	Clients getting hurt/injured
Inappropriate responses	Making the situation worse/overreacting/losing control
Isolation	Feeling trapped/unable to escape

(5) How do you maintain your own and others' safety during an incident of an aggressive and violent nature?

Category options and examples of responses are recorded in Table 4:

Table 4. Category options and examples of responses to how staff maintain their own and others' safety during an incident of an aggressive and violent nature

Options	Examples of responses
Isolate the client	Isolate client/move others away
Remain calm	Keep my cool/stay calm/don't lose it
Follow guidelines	Follow guidelines/follow careplan
Maintain a safe position	Avoid vulnerable position/secure an escape route/keep a safe distance
Make the environment safe	Remove dangerous objects/manage the environment safely
Response varies according to	Depends on circumstances/situation
Create a barrier	Get between clients/create a barrier
Don't know	Don't know
Get help	Get help/contact team

(6) Have you had any training in the prevention and management of aggression and violence?

Options:

- (i) yes
- (ii) no

If yes, please describe below

(7a) Was it useful?

Options:

- (i) yes
- (ii) no

(8) How did it help you in your work with clients?

Category options and examples of responses are recorded in Table 5:

Table 5. Category options and examples of responses about how staff felt that having received training in the prevention and management of aggression and violence had helped them in their work with clients

Options	Examples of responses
Gave confidence	More confident/positive/assured/increased optimism
Increased skills	Increased skills/more able to work with clients/better trained

(9) How do you enable clients to express their feelings of anger and frustration?

Category options and examples of responses are recorded in Table 6:

Table 6. Category options and examples of responses to how staff reported enabling clients to express their feelings of anger and frustration

Options	Examples of responses
By providing opportunities	Facilitate discussion/set aside time
Listening	Listen to client/find out what's
Reassuring	Reassure client/give support
Establishing triggers	Establish
Find/provide alternatives	Sport/exercise/hobbies
Provide privacy	Provide quiet room/time for self
Redirect behaviour	Move the client on/refocus

(10) What skills do you feel you have in the prevention and management of aggression and violence?

Category options and examples of responses are recorded in Table 7:

Table 7. Category options and examples of responses to what skills staff feel they have in the prevention and management of aggression and violence

Options	Examples of responses
None	None
Ability to remain calm	Patience/cool-headed/unflappable
Communication skills	Listening skills/can talk things
In-service training	In-service training
Experience	Hands on experience/work with difficult clients
Knowledge of triggers	Able to spot triggers/Awareness of antecedents

(11a) Do you feel that you need more training in the prevention and management of aggressive and violent incidents?

Options:

- (i) yes
- (ii) no

(11b) If yes, please list all areas in which you require this.

Category options and examples of responses are recorded in Table 8:

Table 8. Category options and examples of responses listing areas in which staff identified they needed further training in the prevention and management of aggression and violence

Options	Examples of responses
All areas	All areas/everything
Prevention	Identifying triggers/preventing violence
Safety issues	How to protect self/others
Control and restraint techniques	Methods of control and restraint/physical intervention techniques
Legal issues	The legal position/legal
Redirection/diffusion	Redirection techniques/how to diffuse the situation

Appendix 2.

Record of incidences of assaults on staff:

[illegible]

Appendix 3: Publications from thesis

Murray, G.C. & McKenzie, K. (1999). An analysis of professional activity in a community learning disability team. *Clinical Psychology Forum*. 126; 21-23.

Murray, G.C., McKenzie, K., Quigley, A. & Sinclair, B. (1999). Gender differences in assault levels in a health service unit for people with a learning disability and severely challenging behaviour. *Journal of Learning Disabilities for Nursing, Health and Social Care* ;3(3),144-147

Murray, G.C., McKenzie, K., Kidd, G.R. & Sinclair, B. (1999). The relationship between staff sickness levels and client assault levels in a health service unit for people with a learning disability and severely challenging behaviour. *Journal of Applied Research in Intellectual Disabilities*. 12(3); 263-268.

Murray, G.C., McKenzie, K., Quigley, A. & Sinclair, B. (1999). The relationship between training and the experience of aggression in the work-place in social care staff working in learning disability services. *Journal of Learning Disabilities for Nursing, Health and Social Care* 3(4), 214-218.

Murray, G.C., Sinclair, B., Powell, H., Simpson, N. & McKenzie, K. (2001). A change for the better. *Learning Disability Practice*. 3(5), 12-15.

McKenzie, K., Matheson, E. & Murray, G.C. (2000) The role of clinical psychology in responding to challenging behaviour in people with a learning disability. *Clinical Psychology Forum*, 136, 8-13.

McKenzie, K, Paxton, D., Murray, G.C. & Matheson, E. (2000). Professional composition of community learning disability teams: implications for service provision. *Health Bulletin* , 58(3); 192-197.

An analysis of professional activity in a community learning disability team

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SINCE THE 1960s there has been a movement towards major changes in the provision of health services to people with learning disabilities. Significant changes in both philosophy of care and government policy have led to a movement of the provision of services away from large long-stay institutions to more community-based service provision. The principles of normalization developed by Nirje (1969) and Wolfensberger (1972) provided the impetus for such changes and the White Paper *Better Services for the Mentally Handicapped* (DHSS, 1971) set out new policies for caring for people with learning disabilities.

One major outcome of the moves towards the provision of residential services in the community was the setting up of community-based teams as a part of the new supporting infrastructure. As services developed, a body of literature began to grow, looking at how these teams operated in their everyday work. Many of these studies however, focused on either the therapeutic approaches used by individual team members in the course of their clinical work or with consumer satisfaction issues (Lowe, 1992; Dagnan et al., 1993; Dagnan et al., 1994). There has been little research into how teams operate as cohesive working groups.

Cohesiveness is defined as a "characteristic of the group in which forces acting on members to remain in the group are greater than the total forces acting on them to leave it" (Davis, 1969). Shaw (1976) notes how group members, who are attracted to the group, work harder to achieve its goals. Working in learning disability services can involve varying degrees of liaising with other professionals, carers and clients, all of which can divide team members' commitment, both in terms of time and other resources. The differing working practices of the professions working within a team may also

produce effects on group cohesiveness.

This study aims to look at how much members of a learning disability team actually work together on cases by comparing client-contact recordings. In addition, this study also aims to evaluate what proportion of individual team members' contact time is actually spent in direct contact with the clients they are working with. Many recording systems used in health services are based on patient-contact data (Hyslop, 1995) and this may not necessarily be the most representative way of measuring work performance of professionals in the field of learning disability where much of the clinical work may be with other direct carers as opposed to directly with the clients themselves.

Method

The team in question is a multidisciplinary community learning disability team based in a rural area of Scotland covering an overall population of just over 100,000. The following professions are represented in the team (whole time equivalent staffing in brackets): clinical psychology (0.8), psychiatry (0.7), nursing (3.0), speech therapy (0.5), physiotherapy (0.6) and music therapy (0.7).

Team members kept records of their contacts with clients over a one-year period in the course of their clinical work for the purposes of this study. Contacts were recorded as either direct (face-to-face) or indirect (via a third party). Contacts were also distinguished as being either lone (the only professional involved) or joint (with another team member).

Results

Overall, 66 per cent of the team's contacts were direct and 34 per cent were indirect. The percentage of direct and indirect contacts for different professional groups are recorded in Table 1.

Overall, 69 per cent of contacts were lone and 31 per cent were joint. The percentage of lone and joint contacts for different professional groups are recorded in Table 2.

Discussion

Direct and indirect contact

On average, the team was found to work more in direct contact with clients and as lone professionals as opposed to with other team members. It is of note however, that there was quite wide variation in the extent to which this occurred for individual team members. In contrast to other professions, clinical psychology spent least contact time with clients indicating a greater degree of work through other direct carers.

Reliability of recording clients contacts

The question of whether contact-type data are the best way of recording work performance in learning disability teams naturally arises. For professionals

more directly treating clients themselves, it may be a fair reflection of their work performance, but for those whose work is more service-based or carer-based the validity and reliability of such data must be questioned. In addition, the data recorded may not be representative of other areas of each professionals work that might be recorded. We have no way of knowing from these types of data what proportion of each individuals work is actually client related. Activities such as training and professional meetings, which may be quite valid and efficient uses of time and resources, will not be recognized. The differing work practices of professions also may not be adequately demonstrated in the recording of contact data. We have no way of knowing things such as the length of time a contact took or be aware of the quality of the work carried out.

There are a number of criteria by which a service can be judged as successful. It may be that the adoption of an approach, such as that advocated by Maxwell (1984), which outlines six dimensions –

Table 1.

Contacts		
	Direct (%)	Indirect (%)
Clinical Psychology	35	65
Psychiatry	56	44
Nursing	60	40
Speech Therapy	56	44
Physiotherapy	92	8
Music Therapy	99	1

Table 2.

Contacts		
	Lone (%)	Joint (%)
Clinical Psychology	52	48
Psychiatry	42	58
Nursing	71	29
Speech Therapy	100	0
Physiotherapy	93	7
Music Therapy	85	15

relevance (appropriateness), equity, accessibility, acceptability, effectiveness and efficiency – would provide a more useful framework for evaluating the performance of a community learning disability service as a whole.

Lone and joint working practices

Variation in how much individual team members worked together was also found. Speech therapy worked exclusively on its own, with physiotherapy and music therapy also working relatively independently of other team members. This may be reflective of the independent nature of the clinical work being performed, that is, work that does not require to be a part of other treatment approaches. By contrast, clinical psychology and psychiatry worked to a much greater degree in conjunction with other team members. This may both reflect the more consultancy-based approaches used by these professional groups, but also the more holistic nature of the therapeutic interventions employed. The types of referrals received by professions may also have influenced the extent to which team members worked together. In relation to specific areas of work there may be teams within the team. For example, the majority of work relating to challenging behaviour is undertaken between clinical psychology, psychiatry and nursing, and each may have different roles in a co-ordinated treatment plan for an individual client.

Conclusion

There is clearly some variation in the way different professionals operate as a part of the community team in this study, and this may largely relate to the roles each team member plays. However, care must be taken when making assumptions about the findings of this study. The findings only relate to the functioning of one particular team covering a specific area and population. It would be interesting to see how these findings compare with teams in other areas or with different professional compositions. The nature of work in learning disabilities is also constantly changing and developing and this may also produce variations in styles of working.

Finally, we should also be aware that contact data are not necessarily representative of the quality of relationships within the team and individual members may work quite closely and cohesively in ways that may not be reflected in these figures.

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Gender differences in assault levels in a health service unit for people with learning disabilities and severely challenging behaviour

G. C. Murray, K. McKenzie, A. Quigley, B. Sinclair

The present study examines gender differences and levels of threatened, attempted and actual assaults on staff working in a health service in-patient unit for individuals with learning disabilities over a 35-month period. It was found that the staff experienced high levels of assault overall, but that women experienced significantly higher levels of both threatened and total assaults as compared with men. Implications of the findings are discussed. © 1999 Harcourt Publishers Ltd.

INTRODUCTION

A significant proportion of individuals with a learning disability have difficulty in managing anger (Kiernan 1991). The inappropriate expression of anger as physical aggression or abuse can be common (Cooper & Mendonca 1991; Harris 1993; Black et al. 1997) and with the implementation of community care policies is increasingly likely to be encountered in community settings (Qureshi & Alborz 1992). Such behaviour can, however, result in the breakdown of family placements (Tausig 1985) and institutionalization for the individual (Borthwick-Duffy et al. 1987).

One response to aggressive behaviours that community services have difficulty in addressing is the development of specialist assessment and treatment units. It is, however, recognized that staff employed to work with such clients are at risk of experiencing high levels of assault (Ghaziuddin & Ghaziuddin 1992; Murray et al. 1999). Such environments can also immediately constrain the social opportunities that individuals have (Clegg 1993; Novaco 1993) and place an emphasis on the interaction between clients and staff in resolving or escalating conflict

situations (Black et al. 1997). High levels of staff turnover and burn-out have been documented as a result of the exposure to risk of violence (Attwood & Joachim 1994). The resulting disruption to good working practices has been found to lead to increased costs for service providers (Baumeister & Zaharia 1986) as well as impacting on client care.

Research in psychiatric services has illustrated a number of gender differences in relation to the experience and management of assault in such in-patient units, with many studies finding that, in services staffed by both men and women, it is women who are as likely or more likely to experience assault than men (Carmel & Hunter 1991; Chaimowitz & Moscovitch 1991; Flannery et al. 1994). One study, however, examined a psychiatric unit that was staffed exclusively by women and found that the staff experienced no incidents of aggression (Levy & Harticollis 1976). Some of the difficulties in interpreting the results may be attributable to differences in male to female staff ratios in different health professions, or to the fact that women may under-report attacks (Rosenthal et al. 1992). However, gender differences in the experience of assaults, not only potentially has a significant impact on the

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victim, with approximately 10% experiencing psychological symptoms associated with work-related assault (Caldwell 1992), but also on service costs, with assaults on female staff being more costly both in terms of human suffering and medical expenses (Hunter & Carmel 1992).

Despite the potential impact that gender can have on both the expression and experience of assault, little research has been carried out in this area in relation to learning disability services. One recent study of community learning disability services found no significant differences between males and females in experience of workplace assault (McKenzie et al. 1999). This study did not, however, examine the total number of assaults experienced by staff and only focused on physical assault. Flannery et al. (1994) emphasize the importance of extending the definition of assault to include severe verbal threats, as experience of the latter was also found to be distressing and frightening for staff.

The present study therefore aims to examine the relationship between gender and client assault levels in a specialist health service unit for the assessment and treatment of challenging behaviours.

METHOD

The unit in question is part of a health service trust mental health provision for individuals with learning disabilities. The unit has five beds and uses ordinary housing adapted for the purposes required. It is staffed by a mix of qualified and unqualified nursing staff with no significant differences between the gender of staff employed at the different nursing grades. The unit also has input from multi-disciplinary team members, including psychiatry, clinical psychology, speech and language therapy, physiotherapy and dietetics. The unit provides a service for individuals with extreme challenging behaviour, with the main reason for admission being verbal and physical aggression. All clients were receiving medication for the treatment of psychiatric illness.

Monthly records were kept in the unit in relation to assault levels experienced over a 35-month period. These were categorized as follows: verbal threats of physical assault; attempted physical assaults; actual physical assaults.

Verbal threats were defined as being when a client threatens to physically assault someone but does not actually follow through the threat (e.g. 'I'm going to get/hit/kill you'). Attempted physical assaults were defined as when a client tried to physically assault someone but was successfully prevented from doing so by staff intervention (e.g. physical restraint). Actual physical assaults were defined as situations where the client causes harm to someone by the use of violent behaviour (e.g. hitting, kicking, biting).

The gender of the member of staff on the receiving end of the threat, attempt or assault, was

also recorded. The data recorded was collated and the relationship between variables analysed using a *t*-test analysis. The ratio of the female:male hours worked in the unit was also calculated and the raw data was adjusted to account for differences in hours worked according to gender. This gave a mean number of threatened, attempted and actual assaults per month for males and females.

RESULTS

Table 1 illustrates the mean number of threatened, attempted, actual and total assaults per month for both males and females calculated over a 35-month period.

A *t*-test analysis revealed a significant difference between males and females both for threatened assaults ($t=2.103$, $df=34$, $P<0.05$) and total assaults ($t=2.119$, $df=34$, $P<0.05$) with females having a higher mean per month for both of these categories. There were no significant differences between males and females, however, for attempted assault ($P=0.86$) or actual assault ($P=0.106$).

Table 2 illustrates the total number of assaults recorded by all staff in the unit over the 35-month period of the study.

DISCUSSION

The present study found that staff working on the unit experienced high levels of threatened, attempted and actual assault. The actual number of assaults per year of 279 can be compared with the figure of 145 assaults over a 1-year period in a 100 bedded institution for people with learning disabilities found by Ghaziuddin & Ghaziuddin (1992). This high level may be attributable to the charac-

Table 1 Mean number of threatened, attempted, actual and total assaults per month for both males and females

Type of assault	Gender of staff members			
	Male		Female	
	Mean	Standard deviation	Mean	Standard deviation
Threatened assault	7.04	6.3	9.84	7.8
Attempted assault	8.89	12.6	11.54	10.5
Actual assault	6.03	6.7	7.89	4.3
Total assaults	21.96	23.8	29.18	19.7

Table 2 Number of threatened, attempted, actual and total assaults recorded by all staff over a 35-month period

	Type of assault			
	Threatened	Attempted	Actual	Total
Number of assaults	1006	1205	815	3025

teristics of the client group, with those individuals with a dual diagnosis of learning disabilities and psychiatric illness being more likely to assault (Ghaziuddin & Ghaziuddin 1992). The present study also found clear gender differences in relation to experience of assault, with women having higher recorded levels of threatened, attempted and actual assaults than men. In addition both threatened assaults and total assaults were found to be significantly higher than that experienced by men.

This finding may be due to a number of factors. Previous research has suggested that men and women may interact differently with patients, for example that women use more verbal de-escalation techniques rather than active restraint (Flannery et al. 1994) and that this can have different associated risks of assault (Levy & Harticollis 1976; Carmel & Hunter 1991). Both the male and female staff in the present study had, however, received training in the management of aggression and violence including de-escalation techniques and recognized methods of physical intervention. There may, however, be differences in the way that such training is applied by men and women. Observational studies of the staff in practise would be required to clarify this further.

The findings of the present study may not, however, be associated with gender per se, but rather features associated with gender such as size, height and strength. Hastings et al. (1997) suggest that factors such as physical build may relate both to emotional responses of staff to and attributions about aggression as well as being related to the ability to exert control. Similarly, clients may act on the basis of physical characteristics of staff. For example, clients may be more inclined to threaten and assault staff who have less physical presence than those who appear physically strong, regardless of the actual ability of staff to manage aggression. On the whole women are smaller and lighter than men and may therefore appear an easier target. A more detailed examination of the relationship between such specific characteristics in staff members and assault may shed more light on this area.

A further reason for the findings of the present study may relate to differences in recording methods. Arnetz et al. (1996) note that the definition of what constitutes violence and aggression can be subjective. Recent research has indicated that males working in a psychiatric setting are more likely to see assaults as an inevitable part of their job (Poster & Ryan 1994), and that males overall, in a study of workplace assault, hold attitudes that are more blaming of victims of assault (McKenzie et al. 1999). It may be that gender differences in the attitudes that staff hold towards assault affect whether they perceive a situation as a threatened, attempted or actual assault and in turn effect the likelihood of this being recorded.

However, a number of other factors have been identified in psychiatric services that also appear to

contribute to the likelihood of assault occurring. These include the nature of the relationship between clients and staff (Binder & McNiel 1994), training in aggression management techniques (Rosenthal et al. 1992) and patient/staff ratio (Lanza et al. 1991). While the applicability and relevance of these findings have yet to be established for learning disability services, the research carried out in psychiatric settings would warn against emphasizing any one single factor as paramount in understanding aggression.

In summary, the present study found high levels of assault in an in-patient unit for individuals with learning disabilities and severely challenging behaviour. Women were found to experience significantly higher levels of threatened and total assault than men. Implications of the findings for future research are discussed.

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The Relationship between Staff Sickness Levels and Client Assault Levels in a Health Service Unit for People with an Intellectual Disability and Severely Challenging Behaviour

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The present study examined relationships between assault levels and sickness levels in staff working in a specialist challenging behaviour unit. The staff group experienced an average of 279.7 total assaults and an average of 422.5 hours sickness occurred each month. No significant relationships were found between total assaults and sickness levels, short- or long-term. Implications of these findings are discussed in relation to the available literature. Methodological difficulties are also discussed.

Introduction

Severely challenging behaviour has been defined as 'behaviour of such an intensity, frequency or duration that the physical safety of the person or others is likely to be placed in serious jeopardy, or behaviour which is likely to seriously limit or delay access to and use of ordinary community facilities' (University of Kent, 1987).

A wide range of behaviours are considered to be challenging, ranging from aggressive and destructive behaviours through to passivity and withdrawal. Behaviour can also be challenging for a variety of reasons which may reflect features of individuals and environments. One of the responses used to address behaviours which ordinary community services have had difficulty in addressing has been the development of specialist assessment/treatment units. However, such units can present difficulties for staff working in them.

Studies examining violent, assaultative and aggressive behaviour in individuals with an intellectual disability have often found that those with severe intellectual disabilities or with a psychiatric disorder are significantly more likely to be involved in assaults (Ghaziuddin & Ghaziuddin, 1992) with prevalence rates ranging from 9.7% in day services to 38.2% in hospitals (Harris, 1993). Staff working with individuals with an intellectual disability and challenging behaviour have been found to be at a significantly greater risk of being assaulted at

some point during their working lives, with the prevalence being greater in in-patient units (Harris, 1993).

The effects of staff stress are now becoming widely recognised as being present in residential services for people with an intellectual disability, both in relation to staff sickness levels and subsequent staff performance (Sharrad, 1992; Hastings *et al.*, 1995; Rose, 1995, 1997; Rose & Schelewa-Davies, 1997). Jenkins *et al.* (1997) demonstrated that staff working with people with an intellectual disability and challenging behaviour in community houses were significantly more anxious than those who worked in houses with no such behaviour. Obviously, staff performance can be crucial, particularly in more specialised units designed to assess, manage and treat clients with significant challenging behaviours. Some studies have demonstrated the relationships that exist between staff behaviours and levels of clients' challenging behaviours (Hastings & Remington, 1994). In addition, inefficient working and care practices have been demonstrated to result in higher costs to service providers (Baumeister & Zaharia, 1986) and a lack of continuity of care to clients (Maslach & Pines, 1977). Poor staff performance is, therefore, not only detrimental to the efficient running of an organisation but may also reinforce and maintain challenging behaviours.

The term 'burnout' is now widely recognised by many people working in intellectual disability services as a way of describing the effects that persistent stressors can have on staff behaviours and well-being. Burnout has been related to low morale, increased absenteeism, greater job turnover and a reduction in the quality of services provided to clients. Burnout has been conceptualised as a state of 'emotional exhaustion', 'depersonalisation' and 'lack of personal accomplishment' (Maslach, 1982). A number of potential factors may impact on staff burnout. Bromley & Emerson (1995) identified sources of stress in care staff working with people with challenging behaviour including: repetitiveness of the caring task, difficulty in understanding the client's behaviour, the unpredictability of client's behaviour and difficulty in finding solutions. In addition, the risk of exposure to violence has itself been found to be related to high levels of staff turnover and burnout (Attwood & Joachim, 1994).

The current study aimed to examine the relationship between staff sickness levels and client assault levels in a specialist health service unit for the assessment and treatment of challenging behaviours.

Method

Setting

The unit in this study is a part of a Health Service Trust Mental Health Service. The unit provides five beds and uses ordinary housing adapted for the purposes required. The unit provides a service to five clients who are currently unable to be supported in social care settings because of their severely challenging behaviour, predominantly consisting of assaults directed at others. All clients displayed verbally and physically assaultative behaviour towards staff. Four clients with severe intellectual disabilities were resident in the unit throughout the period of the study, with the remaining place being occupied on separate occasions by two clients with mild intellectual disabilities. All clients' treatment included the use of medication for psychiatric problems.

The unit is staffed by a mix of qualified and unqualified nurses and has input from a multi-disciplinary team including psychiatry, clinical psychology, speech and language therapy, physiotherapy, music therapy, dietetics and general practice. Nursing input to the unit in hours per calendar month totals 2368 hours, with 1278 and 1090 hours being provided by qualified and unqualified staff respectively. This allowed around three staff on shift when all clients were present in the unit during waking hours. All staff working in the unit were trained in the management of aggression and violence, including de-escalation techniques and methods of physical intervention.

Measures

Daily records of assaults were recorded by nursing staff on sheets specifically designed for this purpose. Recording sheets were designed by the nurse manager and staff received training in their use. The sheets were dated and staff were simply required to tick the level of assault experienced and the time at which it had occurred. Assaults were graded according to the levels in the following list:

- verbal threats of physical assault
- attempted physical assaults
- actual physical assaults

In an attempt to enhance the reliability of recording methods the definitions of these categories were agreed by the staff group. Verbal threats related to circumstances where a client threatened to physically assault someone but did not actually follow through the threat (e.g. the client stated, 'I'm going to hit you!' but did not do so. Insults and other forms of verbal aggression were not included). Attempted physical assaults related to circumstances where a client tried to physically assault someone but was successfully prevented from doing so by staff intervention (i.e. physical restraint was successfully deployed by staff in managing the situation). Actual physical assaults were where the client caused harm to someone by the use of violent behaviour (e.g. hitting, kicking, biting etc.).

Procedure

Results were collated monthly and collected over a period of 18 months. Staff sickness levels were also recorded and totalled each month for the unit over the same 18 month period. A distinction between short-term and long-term sickness was used for the purposes of this study (i.e. short-term = periods of staff sickness up to one week).

Data recorded were collated and, as the data were not found to be normally distributed, relationships between variables were analysed using Spearman's correlation test.

Results

The present study found that the staff group in the specialist challenging behaviour unit experienced, on average, 134.1 threats of physical assault, 88.4 attempted assaults and 57.2 actual physical assaults per month. Total sickness

Table 1 Assault levels and hours lost through sickness

Month	Assault levels			Total	Hours lost		
	Verbal	Attempts	Physical		Short-term	Long-term	Total
1	85	90	55	230	45	420	465
2	122	187	121	430	62	240	302
3	1525	88	87	1700	246	173	419
4	110	141	94	345	38	0	38
5	70	328	214	612	99	518	617
6	40	163	73	276	20	345	365
7	19	64	26	109	45	512	557
8	53	140	55	248	30	53	83
9	12	16	29	57	98	400	498
10	44	54	36	134	97	482	579
11	64	94	56	214	72	430	502
12	25	22	24	71	54	150	204
13	14	17	13	44	40	459	499
14	28	42	28	98	102	498	600
15	76	48	39	163	58	567	625
16	22	30	37	89	34	600	634
17	23	44	21	88	30	338	368
18	82	23	21	126	62	188	250
Total	2414	1591	1029	5034	1232	6373	7605
Mean	134.1	88.4	57.2	279.7	68.4	354	422.5
SD	348.6	79.7	48.8	383.8	51.4	179.7	184.5
Median	48.5	59	38	148.5	56	410	481.5

levels were found to be, on average, at 422.5 hours per month, with 68.4 hours for short-term sickness and 354.0 hours for long-term sickness.

Assault levels and hours lost through sickness per calendar month are recorded in Table 1.

Results of Spearman's correlations are recorded in Table 2. No statistically significant relationships were found between sickness levels and assault levels.

Table 2 Spearman's correlations between assault and sickness levels

Assault level	Spearman's rho	Short-term hours lost	Long-term hours lost	Total hours lost
Verbal	Correlation coefficient	0.255	-0.368	-0.307
	Sig. (2-tailed)	0.207	0.132	0.216
	N	18	18	18
Attempts	Correlation coefficient	-0.078	-0.141	-0.17
	Sig. (2-tailed)	0.76	0.576	0.499
	N	18	18	18
Physical	Correlation coefficient	0.158	-0.111	-0.061
	Sig. (2-tailed)	0.53	0.662	0.81
	N	18	18	18
Total	Correlation coefficient	0.156	-0.243	-0.199
	Sig. (2-tailed)	0.536	0.332	0.428
	N	18	18	18

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Discussion

No significant relationships were found between assault levels and staff sickness levels in this study. This finding is inconsistent with other studies which have found a relationship between absenteeism and factors (like violent behaviour) considered to be detrimental to staff morale (Bromley & Emerson, 1995; Attwood & Joachim, 1994). Previous research has found that one of the main stressors for staff relates to the lack of knowledge about the causes of the challenging behaviour and strategies to reduce it (Bromley & Emerson, 1995). Given the specialist and skilled nature of the staff working in this particular unit, it is likely that staff felt both aware of the function of the behaviour and of strategies in place to manage it.

Rose (1997) suggested a model for staff stress whereby inter-staff relationships acted as a social buffer for stress. The requirement for staff in a specialist challenging behaviour unit to work in close cooperation and have trust in each other in relation to physical safety (i.e. carrying out control and restraint techniques) may act to reduce stress. Staff, in responding to actual physical assaults and attempted assaults, have to take charge and control the situation. In contrast, a verbal threat of physical assault may bring anxiety and uncertainty to staff about if and when the threat may be acted upon, removing the feeling of control from the staff. Such unpredictability has also been found to be a significant source of stress for staff working with individuals with challenging behaviour (Bromley & Emerson, 1995). The finding that a lack of control over aspects of their work can also cause stress for staff has also been demonstrated by Sharrad (1992). However, no such relationships were found by this study. This is again inconsistent with Lawson and O'Brien's (1994) study which found a relationship between days absent and negative social interaction with clients. One could speculate that the positive practices used in the unit and the strong working relationships between staff necessary for this to be possible may have indeed acted as something of a 'stress buffer' as suggested in Rose's (1997) model. It could also simply be that staff sickness and staff stress are unrelated and that reasons for absence are influenced by other factors such as physical illness, staff personality characteristics or general managerial issues.

The present study does, however, have a number of potential limitations. While an attempt was made to improve the reliability of the recording methods by the use of pre-printed forms and agreed definitions of the categories of assault levels, it is acknowledged that the definition of what constitutes an assault can be subjective (Arnetz *et al.*, 1996). Attitudes towards assault can also vary depending on a number of factors, including previous experience of assault and gender (Poster & Ryan, 1994). It may be that such differences among the staff group led to differences both in what was recorded as assault and the stress staff may have felt as a result. While absenteeism is commonly reported as one factor related to stress and burnout (Lawson & O'Brien, 1994), the current study did not include any independent or self-reported measures of staff stress. Thus, it is possible that stress-related staff absenteeism may have been present in the unit but not necessarily in a form measured by this study. However, it is increasingly being recognised by researchers that direct observation/measures of behaviour may be more informative in relation to staff stress than more traditional

self-report measures (Lawson & O'Brien, 1994). The emphasis has, therefore, shifted to the evaluation of more objective indicators of stress (Maslach & Jackson, 1986; Lawson & O'Brien, 1994). It is hoped that the present study will contribute to debate in this area.

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The relationship between training and the experience of aggression in the workplace in residential care staff working in learning disability services

G. C. Murray, K. McKenzie, A. Quigley, B. Sinclair

The present study used a questionnaire to examine the following in 50 social care staff: the experience of workplace aggression in staff supporting individuals with a learning disability, the extent to which staff had received training in the prevention and management of aggressive behaviour and the relationship between training and staff confidence in dealing with aggression. The majority of staff were found to have experienced assault in the course of their work. Despite this, less than half had received training in the prevention and management of aggression. Such training seemed to impact differently on males and females, with trained males feeling confident in managing aggression, and untrained males feeling anxious. In contrast, the majority of females reported feelings of anxiety regardless of previous training. Staff reported strategies for dealing with aggression which mainly involved withdrawal of themselves and others rather than physical interventions. However, there was a neglect of longer-term strategies for dealing with aggression. Implications for practice are discussed. © 1999 Harcourt Publishers Ltd.

INTRODUCTION

Staff supporting individuals with learning disabilities may be at risk of experiencing assault (Harris 1993). With the advent of community care policies for services for people with learning disabilities there has been a transfer from hospitals to settings based within the community. As a result an increasing number of individuals with complex needs and challenging behaviour are being supported in social care settings, with resulting increased demands on staff (Hill & Bruininks 1984). Aggressive behaviour can pose one of the biggest challenges to staff (Black et al. 1997; Harris 1993; Cooper & Mendonca 1991) and staff interventions can be crucial in escalating or de-escalating a situation (Black et al. 1997; Maier 1996).

The ability of services to respond effectively to the challenge posed by aggression relies on staff being able to react safely and appropriately to occurrences of aggression, to develop interventions based on a functional analysis of the behaviour and to implement alternative strategies to meet the individuals' needs (Department of Health 1993; Harris et al. 1997; Mental Welfare Commission 1998). One reactive strategy which may be used is physical intervention (Jacobson 1992). This is defined as 'an action by one person which restricts the movements of another' (Harris et al. 1997) and broadly covers direct physical contact to prevent a behaviour occurring, with the use of barriers, e.g. locking or blocking a door, or utilizing materials or equipment which restrict movement.

Physical interventions are required to be legally

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justifiable and demonstratively in the best interests of the individual. Where they are used, techniques should employ minimum force necessary for the shortest period required and be part of an individual's care plan. (Mental Welfare Commission 1998). In addition, it is emphasized that physical interventions should only be considered following the consideration of alternative approaches (Mental Welfare Commission 1998; Harris et al. 1997).

Recent research has, however, indicated that social care staff place greater emphasis on initial reactive strategies in managing challenging behaviour, while health staff focus on behavioural approaches. Neither group emphasized longer-term strategies of helping the individual to meet his or her needs in alternative ways (McKenzie et al. 1999). The focus on reactive strategies alone may mean that such procedures become self-maintaining and may increase the chances of the behaviour occurring again (Harris et al. 1997). There are situations, however, where staff may need to intervene, using physical interventions to prevent injury to the client, themselves or others. Such unplanned responses from staff are associated with higher levels of risk to those involved (Hill & Spreat 1987). There is, therefore, an emphasis that physical interventions should only be carried out by staff trained in their use (Mental Welfare Commission 1998; Harris et al. 1997). Previous research in health settings has indicated that training in aggression management and prevention can lead to a reduction in behavioural incidents (Allen et al. 1997) and is negatively related to serious assault (Rosenthal et al. 1992).

Despite the fact that there is clear guidance on the use of physical intervention techniques (Mental Welfare Commission 1998; Harris et al. 1997), it is unclear to what extent physical interventions are used in community settings in preference to other approaches, whether staff receive training in their use and what effect, if any, training would have on experience of assault and attitudes towards it.

The present study, therefore, aimed to examine the following factors:

- The extent to which a sample of community staff experienced aggression at work and the relationship between this and previous training in aggression management techniques.
- The relationship between staff feelings and concerns about assault and training received in aggression management techniques.
- The strategies used by staff in managing aggression and violence at work.

METHOD

A sample of staff ($n=50$), who the authors came in contact with as a part of their daily clinical work and who all supported individuals with a learning disability in social care settings, were asked to

complete a structured questionnaire which asked the following:

- The type and frequency of aggression experienced at work.
- How do you feel about dealing with such incidents?
- How do you maintain the safety of yourself and others during these incidents?
- Have you had training in the prevention and management of aggression?
- What skills do you feel you have as a result of training?
- What areas do you feel you require training in?

In addition, participants were asked to provide their age and gender. Thirteen individuals were employed in social work funded day centres and 37 were employed in independent sector housing sector organisations, providing 24 hour staffed support to clients. Respondents were assured that participation was voluntary and that all responses were anonymous. Questionnaires were completed in the presence of one of the authors. All who were approached agreed to participate, giving a response rate of 100%.

A sample of responses (68%) were scored by an independent rater to give a measure of inter-rater reliability.

RESULTS

Reliability

Inter-rater reliability was calculated as a percentage agreement. Concordance rates were 82% or above for all items, with the exception of those which asked participants what skills they felt they had in the management of aggression and in which areas they felt they required more skills in managing aggression. These items had concordance levels of 77 and 75% respectively.

Experience of aggression at work

In total, 33 females and 17 males participated in the study. All but ten of the participants had been employed for over a year. Thirty of the females (91%) and 14 of the males (82%) had experienced some form of aggression at work. Table 1 illustrates the number and percentage of males and females experiencing each type of aggression at work.

Destructive behaviours were those such as throwing/breaking/ kicking objects. Verbal aggression included shouting, swearing, abuse and threats of assault. Physical aggression included hitting, slapping, punching, kicking others, etc. The 'other' category refers to behaviours such as spitting, gestures of abuse or threat and self-injury.

Females reported having experienced more verbal, physical and other forms of aggression at work than males, while the opposite was true for destructive

Table 1 Number and percentage of males and females experiencing each type of aggression at work

Form of Aggression	Female		Male		Total sample	
	No.	%	No.	%	No.	%
Destructive	5	15.2	3	17.6	8	16
Verbal	18	54.5	4	23.5	22	44
Physical	19	57.6	5	29.4	24	48
Other	5	15.2	2	11.8	7	14

behaviour. A χ^2 test demonstrated a significant relationship between the reporting of verbal aggression and gender with more females reporting verbal aggression than men ($\chi^2=4.381$, $df=1$, $P<0.05$). No further significant relationships were found between gender and type of aggression reported.

Training in prevention and management of aggression and experience of aggression at work

Only 14 females (44%) and 8 males (47%) had received training in the prevention and management of aggression. Of these, 18 reported the type of training received. Table 2 illustrates the number and percentage of staff experiencing each type of training.

There were no significant differences found overall between previous training and the experience of aggression at work.

Attitudes towards dealing with aggression

Staff responses were categorized into those indicating anxiety and confidence in dealing with aggression. Anxious responses included the following:

Table 2 Number and percentage of staff experiencing each type of training

Type of training experienced	No.	%
In-service	5	27.8
Control and restraint techniques	3	16.7
Outside course/talk	3	16.7
Distance learning pack	2	11.1
Advice from health professionals	2	11.1
Specific techniques (eg. Wrist hold)	2	11.1
As a part of nurse training	1	5.5
Total	18	100

apprehension, worry, anxiety, nervousness, etc. Confident responses included: comfortable, confident, no real concerns, no problems, etc. Eighty per cent of females reported feelings of anxiety in relation to dealing with incidents of aggression and only 20% reported feeling confident. By contrast, only 50% of the males reported feelings of anxiety, while the other 50% reported feeling confident. Table 3 illustrates the number of males and females reporting feelings of anxiety or confidence in relation to whether they had received training in the management of aggression.

The above data suggest that previous training in the management of aggression makes little difference for females in terms of reducing anxiety. Conversely, for males, such training would appear to impact on the reporting of feelings of anxiety and confidence. Seventy-one per cent of males who had received training reported feeling confident, while 67% of those who had not, reported feeling anxious.

Skills in managing aggression

No significant differences were found between males and females in reported skills in managing aggression. Differences were, however, found in relation to requests for further training, with 39% of females requesting 'control and restraint' techniques and no males requesting any further training.

Responses to incidents of aggressive behaviour

Staff strategies were grouped according to the categories below, in Table 4. Table 4 illustrates the number of participants outlining particular strategies used to ensure the safety of themselves and others.

No significant differences in reported strategies used for dealing with aggression were found

Table 3 The number of males and females reporting feelings of anxiety or confidence in relation to whether they had received training in the management of aggression

	Anxious				Confident			
	Males		Females		Males		Females	
	No.	%	No.	%	No.	%	No.	%
Previous training	2	28.6	10	76.9	5	71.4	3	23.1
No previous training	6	66.7	12	80	3	33.3	3	20

Table 4 Number of staff outlining particular strategies used to ensure the safety of themselves and others

Strategy used	No. of respondents
Isolate the individual	22
Remain calm	11
Take up a safe position	10
Ensure the environment is safe	9
Follow existing guidelines	4
Reaction varies with circumstances	3
Get help	2
Create a barrier between client and others	1
Unsure	1

between males and females who had received training and those who had not.

DISCUSSION

The present study found that almost all of the staff in this study had experienced some form of aggression at work, with females being significantly more likely to report verbal aggression. Similar results have been found for health service staff working with clients with a learning disability (Murray et al. 1999). This gender difference may be attributable to features associated with gender such as size, height and strength (Hastings et al. 1997). Clients may be more inclined to threaten individuals who have less physical presence. Women are generally smaller and lighter than men and may therefore appear as easier targets.

Despite the majority of staff having experienced some form of aggression at work, most had not received training in the prevention and management of aggression. For those who had, the majority was in-service or limited in its scope, for example, advice or focusing on a specific restraint technique. In contrast to other studies which have found that training reduces the number of behavioural incidents and is negatively associated with serious assault (Rosenthal et al. 1992; Allen et al. 1997), the present study found no overall relationship between training and reporting of aggression. Training did, however, appear to have some impact on the confidence of men to deal with aggressive incident, with almost three-quarters of those who had received such training reporting confidence. Similarly, two-thirds of men who had not received training reported anxiety in dealing with aggression. This relationship did not appear to hold true for women, with the majority expressing feelings of anxiety regardless of whether they had received previous training or not.

This difference may be due to a number of factors. Firstly, as noted, females tend to be physically smaller and weaker than males and they may be aware that a stronger, heavier male may still be

able to harm them, despite their training. Secondly, the study did not ask for specific details of the content of previous training received. It may be that the females received training with a different emphasis from the males, for example de-escalation techniques rather than 'control and restraint' techniques. This may lead to differences in confidence in managing aggression, despite training. This may be supported by the fact that a significantly greater number of females requested training in 'control and restraint' techniques, compared with men.

In relation to the strategies reported by staff as being used to manage aggressive incidents, the majority did not involve physical interventions on the part of staff. Indeed, only three of the participants had received specific training in physical intervention techniques. Instead, the staff emphasized the need to remain calm, ensure that people were safe or ask others to leave the situation. However, as with previous studies (McKenzie et al. 1999) there was a lack of emphasis on the use of longer-term strategies to help the individual. This may mean that situations are perpetuated whereby the client continues to display aggression and staff continue to ensure the safety of others, but the cause of the aggression is not addressed or resolved. This would suggest that staff may need broader training in managing aggression that encompasses environmental, behavioural and positive programming approaches as well as reactive strategies, as recommended by a number of recent documents (Department of Health 1993; Harris et al. 1997; Mental Welfare Commission 1998).

The present study does, however, have limitations. As was noted above, respondents did not give specific details of the content of training they had received in the management and prevention of aggression. It is therefore possible that the results of the study are attributable to differences in training received by staff. A more detailed examination of the specific effects on attitudes and behaviour of particular training components would help clarify this issue. In addition, the study did not document the number or severity of the incidents of aggression reported by staff. The definition of what constitutes aggression can be subjective (Arnetz et al. 1996) and it may be that factors such as the experience of a particularly serious assault or a large number of assaults influenced both reporting of aggression and responses relating to skills in, and feelings about, managing aggressive incidents. A further limitation is that the results were based on respondents' written responses to a questionnaire. The approaches that staff identify in dealing with aggression may not be entirely representative of those that they use in practice. Hastings and Remington (1994) report differences between staff reports about responses to challenging behaviour and observational studies that reflect actual responses.

A CHANGE FOR THE BETTER

GEORGE MURRAY AND COLLEAGUES DESCRIBE HOW A FUNDAMENTAL
REVAMP OF A CHALLENGING BEHAVIOUR SERVICE WAS UNDERPINNED BY
A STAFF CONSULTATION EXERCISE

A common reason for referrals being made to health staff working in learning disability services is challenging behaviour (McKenzie *et al* 1999). A wide range of behaviours is considered to be challenging, ranging from aggressive and destructive behaviour through to passivity and withdrawal. Behaviour can also be challenging for a variety of reasons, which may reflect features of individuals and environments.

Responses to referrals relating to challenging behaviour may range from input from local community teams to specialist inpatient units. For those clients whose current behaviour cannot be managed in community settings, inpatient assessment and treatment units offer an alternative (Scottish Executive 2000). Interventions used in patient units have been shown to be effective (Gaskell *et al* 1995) and to lead to clients being returned to their community placements. A number of advantages of secure units have also been outlined, including the ability to provide a therapeutic environment in terms of clear boundaries and expectations, structure and predictability, and team approaches (Turner 1998). In addition, they have been identified as a means of pro-

viding protection to others, presenting a short term solution to acute problems, acting as a centre of excellence and providing confidence to other services who know that specialist facilities are available if required (McBrien 1987).

However, there has also been criticism of such units. For example, concern has been raised over whether a behaviour is being addressed in the context of the environment in which it occurs. Also, it is possible that the existence of the unit may prevent the development of skills in local services; furthermore there is concern that grouping together people with difficulties may actually serve to compound their problems (McBrien 1987; Emerson *et al* 1987).

The social environment has been identified as being particularly important for people with a learning disability and it has been argued that frequent relocations and limited social integration is related to continued psychological and behavioural difficulties (Van Minnen and Hoogduin 1998). It is also argued that providing intensive support in the community can be a cost-effective model for managing challenging behaviour (Allen and Lowe 1995). These factors have increasingly led service providers

to question the effectiveness of providing unit-based services and to examine the benefits of community based services (Dixon 2000).

There has, however, been little research examining the views of staff whose skills are transferred from unit based to community services or about the views of social and independent care providers with whom the responsibility for the majority of residential care for people with a learning disability is now placed. The present study aims to survey the views of two groups of people who are involved in a plan to move from a unit based challenging behaviour assessment and treatment model to a more community based alternative.

The unit involved in the study is part of a NHS trust's service to people with a learning disability in a rural area of Scotland with a population of around 106,000. The unit provides five assessment and treatment in-patient beds for people with a learning disability and with challenging behaviour. The unit is staffed by a mix of qualified nurses and unqualified assistants and has input from a multidisciplinary team, including psychiatry, clinical psychology, speech and language therapy, physiotherapy, music therapy, dietetics and general practice. All members of staff working in the unit are trained in preventing and managing aggression and violence, including de-escalation techniques and methods of physical intervention.

The service plan was to reduce inpatient bed usage, thus freeing staff to work in assessing and treating people in the environments in which they live. There would be no reduction in bed availability as it was considered important to have inpatient assessment as an option, if required. It was felt that this model would enable nursing staff to work more directly with other professionals in the community team and directly with other service providers who currently care for the people in question. Before any service changes were implemented, the idea was presented to and developed with the views of the current inpatient staff group being taken into account.

A questionnaire was developed in order that qualified nursing staff (n = 7) could independently express their views about the proposed service changes. Following this, a series of presentations to other independent sector providers took place to explain the proposed changes. Representatives of care organisations (n = 14) were asked to complete questionnaires after discussion with their staff groups in order that their views on the proposed changes could be taken into account. Both sets of views were collated and analysed, with the aim of including them in the identification of training needs in relation to the proposed move. Views were categorised on the basis of being 'advantages' or 'disadvantages' that would either suggest the idea was not favourable or would identify an area in which further work would be required.

Table 1 Views of unit staff and independent sector representatives

VIEWS	UNIT STAFF (N = 7)		IND. SECTOR (N = 14)	
	NO.	%	NO.	%
ADVANTAGES				
More valid assessments carried out <i>in situ</i>	4	57	6	43
Less disruption to clients	5	71	1	7
Opportunity to increase skills/experience	3	43	4	29
More flexible service	2	29	2	14
Easier contacts with services/carers/families	2	29	9	64
Staff collaboration across agencies increased	0	0	5	36
More direct treatment <i>in situ</i>	0	0	3	21
Awareness of community issues for unit staff	0	0	5	36
DISADVANTAGES:				
Isolation from peer group	4	57	0	0
Less 24 hour observation	1	14	0	0
More reliance on views of untrained staff	2	29	0	0
Impact on other service users <i>in situ</i>	0	0	3	21
Need to adjust to new ways of working	0	0	2	14
Staff may feel threatened by being observed	0	0	7	50

The results from the survey are shown in Table 1 above. These results show that the most frequently identified advantage for the unit staff was the reduced need for those people with learning disability requiring such a service having their lives disrupted by an admission to the unit. This factor has been identified as contributing to the psychological and behavioural disturbance of service users (Van Minnen and Hoogduin 1998). For independent sector provider representatives the most frequently cited advantage was easier contact with services, carers and families. Twenty-nine per cent of the unit staff also identified this as an advantage.

Research suggests that the way others react to people with a learning disability and their behaviour can influence the likelihood of success in interventions aimed at treating challenging behaviour (Hastings et al 1995). Better contact may lead to increased quality of communication and more opportunities to model appropriate approaches to challenging behaviour in the situations in which they are known to occur. Both groups frequently identified that assessments would be more valid as they would be carried out in the service user's normal environment.

Previous criticisms of unit-based interventions have centred on their failure to generalise or transfer to the community setting once the service user has been discharged, and the inherent lack of validity of an assessment in an unusual environment carried out by staff with different approaches and skill levels (McBrien 1987). Both groups also saw the opportunity to increase skills and knowledge as a major advantage. Recent policy documents have highlighted the need for collaboration and joint working to facilitate good quality services (Department of Health 1993; Scottish Executive 2000).

Disadvantages included the tendency of both groups to see things from their own positions. The unit staff expressed some concern about a possible lack of peer support when working in community settings, which were more isolated from their familiar staff grouping. Previous research has suggested the importance of peer support in acting as a buffer against stress for staff working in learning disability services (Rose and Schelewa-Davis 1997; Murray *et al* 1999). Independent sector provider representatives expressed some concern that involvement of their staff in assessments and being observed by others might make them feel 'threatened'. Both sets of views represent a degree of uncertainty about how people operate across service boundaries. This highlighted the need for further work in order that the transitions for staff could be made more easily.

These views also promoted a need to look more closely at philosophies of care and working practices across service settings in order to ensure compatibility. In a purely unit based model such issues are often easy to overlook. Both groups had clear views on what might be required to make the new service a success. The main priority was to check regularly on the progress of the proposed change in service delivery. Change can be threatening in itself and can produce resistance in staff (Glynne and Perkins 1995).

One means of easing this is to involve those who will be affected by the process. This is known to enhance feelings of staff ownership and involvement in the process of change (Willmot 1998; Paxton and McKenzie 2000).

CONCLUSION

In conclusion, the present study suggests that, on balance, views about a proposed move from a unit based model of assessing and treating challenging behaviour to a more community based outreach model were favourable across staff groups with more advantages than disadvantages being identified. The study clearly identified areas for further staff training and service planning and demonstrates the benefits of involving those on whom service changes will have an impact in the process.



LAURENCE BALATIS

The consensus of staff opinion was that the option of developing a service in the community had more advantages than disadvantages



Running consultation exercises over moving services from hospital based units into the community can help staff to voice their concerns and may ultimately make them more likely to succeed

This period of consultation is planned to continue as the service develops towards a model in which challenging behaviour is assessed and treated in service users' normal environments. Admissions to the five beds available in the in-patient unit should then only be used when community based assessments and treatments are not feasible.

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The role of clinical psychology in responding to challenging behaviour in people with learning disabilities

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CLINICAL PSYCHOLOGISTS have traditionally offered a service to people with learning disabilities and, along with other professionals, were motivators for change and served as champions for community care (Brown and Griffiths, 1990). Community learning disability teams developed in response to community care policies for individuals with a learning disability. These policies in turn were largely shaped by the Principle of Normalization (Wolfensberger, 1972) which argued that people with a learning disability are entitled to patterns of life equivalent to those experienced by non-disabled people. The role of the clinical psychologist in learning disability services has had to respond to a number of philosophical, political and social changes which have impacted on the way such services are organized and delivered (Greig and Peck, 1998).

A number of the functions originally undertaken by community learning disability teams, in particular assessment, care planning and service planning, have, with the implementation of the NHS Community Care Act (1991), largely become the remit of local authority care managers and joint commissioning agencies (Greig and Peck, 1998). One of the main areas in which community learning disability teams continue to play a key role is in the assessment and treatment of challenging behaviour. This is most commonly defined as:

Behaviour of such an intensity, frequency and duration that the physical safety of the person or others is likely to be placed in serious jeopardy ... or is likely to seriously limit or delay access to and use of community services (Emerson et al., 1987).

While the general public has been found to be unclear about the role and area of competence of

clinical psychologists in some specialities (Wollersheim and Walsh, 1993) clinical psychologists working in learning disability services have traditionally been perceived as playing a key role in the assessment and treatment of challenging behaviour. Such behaviour can often be longstanding in nature and be sensitive to changes in the environment, staffing levels and staff approaches (Hastings and Remington, 1994a). Challenging behaviour can also have different and multiple causes and Hastings and Remington (1994b) note that a behavioural assessment based on psychological principles is essential to the development of appropriate intervention strategies. The training and experience of clinical psychologists has ensured that they have a major contribution to make in respect of challenging behaviour.

The aim of community learning disability services is to provide support and advice to carers to allow the individual with a learning disability to remain within mainstream services. As more individuals with complex needs and behaviour which challenges, are discharged from hospital to community settings the demands on care staff (Hill and Bruininks, 1984) and subsequently on clinical psychologists increase.

Trusts in Scotland differ in terms of the professional composition of their community learning disability teams; clinical psychology is one of only three professions represented in all of the teams. In addition, different professions within the team have been found to operate in differing ways, with clinical psychology tending to work in conjunction with other professions and to adopt a more consultancy-based approach (Murray and McKenzie, 1998). However, an examination of the impact of challenging behaviour referrals on the workload

and response by the clinical psychology profession has not been made. The present study therefore aimed to examine the number and nature of challenging behaviour referrals to a newly established clinical psychology learning disabilities service.

Method

The service in question was based in a rural part of Scotland and served a population of approximately 168,000. The clinical psychology post was for eight sessions and covered two multidisciplinary community learning disability teams. The service has an open referral system, that is, referrals are accepted from any source. All of the referrals made to the clinical psychologist over a 15-month period were coded by an independent rater in respect of reason for referral. Those which were identified as relating to challenging behaviour were further coded in respect of the following:

- specific reason for referral;
- source of referral;
- length of input, both in terms of direct contacts with the client and indirect contact with carers and families (a contact was defined as a period of 30 minutes or more);
- re-referral for the same problem within the 15-month period;
- whether clients had previously received input from specialist services (for example, Challenging Behaviour Unit) and if they were subsequently referred on to such a service.

Results

The newly established clinical psychology service received 132 new referrals over a 15-month period. Of these 88 (66.7 per cent) were identified as being in relation to challenging behaviour. Of the 88 individuals referred 43 (48.9 per cent) displayed two or more different types of challenging behaviour, for example, physical aggression and exposure, giving a total number of 154. Thirty-one of these individuals already received input from other team members (community nursing 23, psychiatry four, speech and language therapy four) in relation to the challenging behaviour. The remaining referrals not identified as relating to challenging behaviour were for intellectual assessments, counselling and educational input.

Type of challenging behaviour referral

Table 1 illustrates the number of each type of challenging behaviour for which referrals were received.

As can be seen from Table 1, the most frequently occurring type of challenging behaviour indicated by the referrer was in relation to verbal aggression, with both physical aggression to others and property also occurring frequently. The next highest category related to anti-social behaviour. This included smearing, spitting, vomiting and soiling. Another significant category was for sexually inappropriate behaviours with 15 separate references to this. This ranged from rape and sexual abuse of children to masturbation in public.

Source of referral

Table 2 illustrates the number of challenging behaviour referrals made by each referral source. Independent referrals relate to those made by the client him or herself.

As can be seen from Table 2 the majority of referrals came from social work, with the next largest source being from other health professionals within the team. Only two were self-referrals.

Re-referrals

Overall, only 17 per cent of referrals for challenging behaviour were re-referred within the fifteen-month period of the study. Table 3 illustrates the percentage of individuals who were re-referred for the same reason within a fifteen month period broken down by type of challenging behaviour.

Table 3 indicates that the most common reasons for re-referral were for alcohol/drug use (although this related to only one client), sexually inappropriate behaviour and physical and verbal aggression.

Length of input

The mean number of direct contacts with clients for all types of challenging behaviour was 2.3, while the mean number of indirect contacts was 3.2. Overall, the mean contact numbers for both direct and indirect contacts was found to be 5.4. Those individuals who were referred for more than one type of challenging behaviour (43) had a higher mean number of total contacts (8.4) than individuals referred for only one type of challenging behaviour. The mean number of total contacts for the latter group was 2.6.

Table 1. Number of each type of challenging behaviour referred to Clinical Psychology

Type	Number
Verbal aggression	36
Physical aggression – towards others	34
Physical aggression – towards property	20
Passivity/withdrawal	4
Sexually inappropriate behaviour – towards children	2
Sexually inappropriate behaviour – towards adults	7
Sexually inappropriate behaviour – other	6
Self-injurious behaviour	8
Anti-social/other	29
Theft	2
Alcohol/drug	2
Ritualistic/obsessive	4

Table 2. Source of referrals to Clinical Psychology for challenging behaviour

Source of referral	Number
Social work	37
Community nursing	15
Clinical psychology (OHB)	1
Psychiatry	14
Occupational therapy	1
General practitioner	4
Residential	15
Independent	2

Input from other services

Eighteen individuals (20.4 per cent) were known to have previously received input from either a regional challenging behaviour unit or challenging behaviour team. Of the 88 referrals, two were referred on to adult services when it was found on assessment that they did not have a learning disability. Two clients were subsequently referred on to the challenging behaviour unit, following sexual offences and for an assessment of mental health.

Discussion

The results of the present study indicate that for the clinical psychology service in question two-thirds of referrals are as a consequence of challenging behaviour. The move to community care appears to have resulted in the requirement for care staff who may be unqualified and untrained to support individuals with challenging behaviour (Hill and Bruininks, 1984). Research has found that carers supporting individuals with learning disabilities in family homes and community houses rate more

Table 3. Individuals re-referred for same type of challenging behaviour as percentage of total referrals for each type

Type	Number
Verbal aggression	13.89
Physical aggression – towards others	15.71
Physical aggression – towards property	5
Passivity/withdrawal	0
Sexually inappropriate behaviour – towards children	0
Sexually inappropriate behaviour – towards adults	28.57
Sexually inappropriate behaviour – other	33.33
Self-injurious behaviour	12.50
Anti-social/other	10.34
Theft	0
Alcohol/drug	100
Ritualistic/obsessive	0

behaviours as presenting a severe challenge than carers in hospital (Lowe and Felce, 1995). Carers may respond to this by referring to clinical psychology services for support. Most of the referrals were found to come from social work. This is likely to be a result of NHS Community Care Act (1991) which largely gave the responsibility for co-ordinating and reviewing client care to local authority care managers. To fulfil this function social workers liaise with many of the organizations which provide support to individuals with a learning disability and are therefore well placed to identify difficulties early on and access health services for support. Only four per cent of referrals were received from GPs. This may reflect the on-going confusion about the role of community learning disability services in providing for the health care needs of people with learning disabilities (Kerr et al., 1996), but may also be a consequence of carers reporting difficulties to their care manager rather than the GP. Only two per cent of individuals referred themselves to the service. This is consistent with that individuals with a learning disability are often referred to the health services by others and may not be aware of the reason for the referral.

The greatest number of referrals related to aggres-

sion, both physical and verbal. There has been a great deal of research indicating that staff and carer assault is associated with staff burn-out and turnover (Bromley and Emerson, 1995) and that verbal threats of aggression are more likely to be associated with staff sickness than actual physical aggression. It is therefore unsurprising that a high number of referrals were received for this difficulty. A large number of referrals were also received for some form of sexually inappropriate behaviour, with 60 per cent of these types of referral being for sexual assault of adults and children. While previous research has indicated that carers may not always intervene effectively in situations where the client or others are at risk (Hastings et al., 1995), and that sexual assault can go unreported (Lyall et al., 1995), nearly 10 per cent of challenging behaviour referrals in the current study related to sexually inappropriate behaviour.

Overall, 17 clients were referred back to the service within a 15-month period. Four of these were as a result of a group for individuals who had committed sexual offences resuming after an agreed break. The next largest group was for aggression, perhaps again indicating the stress that such behaviour causes for staff. By its very nature, challenging

behaviour arises when some aspect of a service provision does not meet the needs of the individual. Its occurrence can be related to factors such as environmental change, staff attitudes, knowledge and approaches (Hastings and Remington, 1994a). In addition, high levels of staff turnover have been found in care staff supporting people with a learning disability (Bromley and Emerson, 1995). The combination of these two factors may result in psychological approaches agreed with and implemented by staff breaking down due to staff changes. This may lead to the re-emergence of the challenging behaviour and subsequent re-referral to clinical psychology.

Overall, nearly 83 per cent of referrals were not re-referred during a 15-month period, and only two individuals were referred on to other services either by clinical psychology or another individual. This may give some indication of the effectiveness of clinical psychology input. An alternative explanation, however, is that the individuals improved for reasons independent of psychology input or that staff attitudes towards the behaviour changed so that they no longer perceived it as challenging. It should be noted that 31 of the individuals referred also received input from other professionals within the community learning disability team, primarily community nursing, in relation to their challenging behaviour. As noted, the causes of such behaviour can be complex and multiple and may result from mental health problems or serve a communication function (Thurman, 1997). Under such circumstances a multidisciplinary approach may be required to generate the most effective intervention, rather than the input of one profession alone.

Overall, the mean number of contacts in response to challenging behaviour referrals was not particularly high, although the results indicated that the clinical psychologist had more contact time working indirectly with staff than engaging in direct clinical work. A similar result was found in relation to the overall role of clinical psychology within a community learning disability team (Murray and McKenzie, 1998). Those individuals who were referred for more than one type of challenging behaviour did however, receive more overall contacts, perhaps reflecting the more complex nature of their behaviour. Such individuals were not, however, found to be any more likely to be re-referred than those who displayed only one form of challenging

behaviour. In addition, only two individuals were subsequently referred on to regional challenging behaviour services. This would suggest that the input of clinical psychologists in conjunction with other professionals within the community learning disability team is largely achieving the aim of maintaining individuals with a learning disability in mainstream services.

In summary, the present study would indicate that the clinical psychology service examined had a clear role to play in assessment and treatment of challenging behaviour and that such referrals constituted a large proportion of the workload. Referrals were most likely to come from social workers and to be for verbal and physical aggression. Referrals for more than one type of challenging behaviour required more contacts overall, but were no more likely to be re-referred. Re-referral rates were low but were found to occur most often for aggression.

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Dyslexia, Literacy and Psychological Assessment

Report of The British Psychological Society Division of Educational and Child Psychology Working Party

This new substantial review of research into dyslexia has established an understanding of dyslexia that focuses on word reading and spelling skills and shows the importance of the current literacy strategy in schools. It considers literacy learning at the "word level" of the National Literacy Strategy and identifies dyslexia as persistent and severe difficulties with literacy acquisition in spite of appropriate learning opportunities. It recommends that educational psychologists work with teachers and parents to develop approaches and skills so that individual needs can be noticed from an early stage and teaching adjusted to accommodate these needs.

The report considers a wide range of theory and research about dyslexia. One firm conclusion is that the ability to recognize and remember sounds in words is an important element in children's successful reading. Difficulty in developing this phonological awareness and memory is increasingly seen as link to dyslexia. With its strong emphasis on learning phonological skills, the National Literacy Strategy can certainly provide the basis for helping these children.

The report is 124 pages long and the contents are as follows: Summary; Recommendations; Introduction; A working definition of dyslexia; Literacy learning and dyslexia; Theoretical explanations; Implications for educational psychology assessment and intervention; Special educational needs and dyslexia.

Dyslexia, Literacy and Psychological Assessment is available (£5 Society members, £12 others) from The British Psychological Society, St Andrews House, 48 Princess Road East, Leicester LE1 7DR. Please make cheques payable to BPS DECP.

Professional composition of community learning disability teams in Scotland: Implications for service provision

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Abstract

A survey of all trusts in Scotland who provided specialist services to people with learning disabilities was made with a response rate of 100%. An examination was made of the professional composition of the community learning disability teams and the population covered. A disparity was found across Scottish trusts in the professions represented in the community learning disability teams with some professions having no input. Nursing and Clinical Psychology were found to be the two professional groups with largest representation across Scotland and along with Speech and Language Therapy had representation in all of the Teams. A review of some of the factors which have impacted on the role and professional composition of these services is made and the implications discussed.

Introduction

Services for people with learning disabilities have changed markedly since the 1960s, with a rejection of what was perceived as a medical model of care in preference for a social/educational model. This led to the development of a range of community-based services which enabled people who did not require specialised medical or nursing attention to live at home or in small scale residential units. These changes were largely a result of the Principle of Normalisation¹ which argued that people with a learning disability were entitled to patterns of life which were equivalent to those experienced by non-disabled people. The new philosophy was encapsulated by the White Paper "Better Services for the Mentally Handicapped".²

The development of community learning disability teams was one of the major means of implementing community care policies for learning disabled people, with the professionals often being the motivators for change.³ The role of team has however changed markedly since the 1980s, when it served as both a champion for, and a response to community care.⁴ With the implementation of the NHS Community Care Act⁵ the previous role of community learning disability teams in strategic and individual service planning and development has largely been undertaken by local authority care managers and joint commissioning structures,⁶ requiring the teams to re-evaluate their function.

An additional factor which has recently impacted on the role of community learning disability teams is the increasing awareness that individuals with a learning disability are likely to experience a greater number of health problems than the general population, and that these needs may not always be adequately met.⁷ It is estimated that approximately 24 people per thousand have a learning disability.⁸ Of these 30% may suffer significant mental health problems, which is a higher proportion than in the general population.⁹ Additional health needs include epilepsy, communication problems, hearing and visual impairments, obesity, heart disease, orthopaedic and other problems of mobility.⁸

Recent documents have identified primary health care teams as the responsible group for the provision of health care to people with learning disabilities,^{8,10} but there continues to be a debate about the role of specialist

services, with a call for collaboration between primary health care and community learning disability teams.^{11,12}

A further area in which specialist services continue to play a major role is in the assessment and treatment of challenging behaviour. Challenging behaviour is commonly defined as behaviour of "such an intensity, frequency and duration that the physical safety of the person or others is likely to be placed in serious jeopardy...or is likely to seriously limit or delay access to, and use of, community services".¹³ As more individuals with complex needs and behaviour which challenges the service are discharged from hospital to community settings the demands on care staff,¹⁴ and subsequently on community learning, disability team members, increase. The aim of specialist services is to provide support and advice to care staff to allow the person with a learning disability to remain within his or her own home and mainstream services.

Meeting the often multiple and complex health care needs of people with learning disabilities has implications for the responsible services, both in terms of financial and professional resources required. This has led to an examination of the many factors that impact on the goal of equitable resource allocation. The most obvious of these is the greater prevalence of individuals with a learning disability in a given area.¹⁵ One of the main sources of variation which impact on service provision and planning is the greater number of individuals with a learning disability living near sites of learning disability institutions.¹⁶ In addition there has been a pattern of learning disabled individuals being located outwith their original area of origin. At present resource allocation does not take account of the extra demands placed on services associated with out-of-area placements.¹⁵

The many philosophical, political and organisational changes that have occurred has led to a recent examination both of the remit⁶ and composition of community learning disability services in England and Wales.¹⁷ A similar examination has not however been made for learning disability services in Scotland. There has been a more cautious approach to the implementation of community care policies in Scotland, with a number of large institutions still in the process of

closing. The role and service requirements of community learning disability services are still to some extent being shaped and developed as the health needs of individuals become apparent on their discharge from institutions.

The present study therefore aimed to survey all NHS trusts in Scotland which provide a specialist service to individuals with a learning disability, to provide a picture of the current professional composition of the services, and the implications this may have for service provision.

Method

All National Health Service trusts in Scotland were contacted by telephone and asked if they provided a specialist service to individuals with a learning disability. The thirteen trusts which did so were asked to provide a contact name and number of the administrator or manager of the learning disability service. These individuals were contacted and the nature of the study explained to them. All of the trusts contacted agreed to participate and provided the following information:

1. The population covered by their service
2. The professional composition of their adult community learning disability service.

This included qualified and unqualified staff and posts which were currently unfilled, but excluded staff attached to additional support or challenging behaviour teams.

All but two areas were able to provide this information immediately over the telephone. One area telephoned back the next day with the information and one subsequently wrote back. This gave a response rate of 100%.

Results

The results refer only to those trusts in Scotland which provide a specialist community learning disability service (n=13). As noted above, the figures reflect adult community learning disability services and exclude staff working in additional support or challenging

behaviour teams who provide a centralised service to more than one trust. The average population served by these trusts was found to be 341,384 with a minimum of 100,000 and a maximum of 900,000.

Table 1 illustrates the average number and range of whole time equivalent staff in each profession providing a community learning disability service per 100,000 population.

Table 2 illustrates the number of Scottish trusts which have no input to community learning disability teams for certain professional groups.

Table 1. Average professional composition (whole time equivalents) of community learning disability teams per 100,000 population for all 13 Scottish trusts

Profession	Average WTE/100,000 Population	Minimum	Maximum
Psychiatry	0.5	0	0.9
Nursing	4.2	2	8.1
Clinical Psychology	1.3	0.5	3
Speech & Language Therapy	0.6	0.1	2.5
Occupational Therapy	0.5	0	2.3
Physiotherapy	0.8	0	1.8
Dietetics	0.2	0	0.4

Table 2. Number of Scottish trusts which have no input to community learning disability teams from each professional group

Profession	No. of Trusts without this profession
Psychiatry	2
Nursing	0
Clinical Psychology	0
Speech & Language Therapy	0
Occupational Therapy	3
Physiotherapy	1
Dietetics	5

Discussion

This study found disparity between Scottish trusts in the professions represented in the community learning disability teams. A number of social, philosophical and political changes have impacted on the role and remit of community learning disability teams as described above. In addition, the changing emphasis on particular aspects of the service that teams provide has led to developments in particular professional groups. One example is the development of 'specialist' roles in dealing with challenging behaviour resulting in corresponding changes in emphasis within team, with the clinical psychologist,¹⁸ psychiatrist and community nurse playing key roles.⁶ Similarly the increasing recognition of unmet health needs in the learning disabled population and the view of some general practitioners that meeting these needs is the remit of community learning disability teams¹⁹ suggests a need to re-examine the role of the team, with a corresponding emphasis on the role of community nurses.

The differences in the professional composition of community learning disability teams per 100,000 population across the Scottish trusts may reflect this dynamic process with trusts responding to local needs in their area. Some findings were, however, consistent across all trusts. The professional group with largest representation for all trusts was community nursing followed by clinical psychology. A similar result was found for learning disability services in both hospital and community settings in England and Wales.¹⁷ There were no Scottish trusts which did not include some representation from these two professions in the learning disability teams. This service profile for nursing and clinical psychology may reflect the broad remit of these professions and their historical role in the provision of care to people with learning disabilities. The only other profession represented in all trusts was speech and language therapy. This may reflect the recognition that many individuals with a learning disability have communication difficulties which may impact on most areas of their daily life.⁸

It is of more concern that the remaining professions were not represented in all of the Scottish trusts' community learning disability services. Some generic services, in particular dietetics, could be accessed via

the clients' general practitioner. Such services would not however be provided in the context of a multi-disciplinary framework or by specialists in the field of learning, disabilities. Research suggests that some general practitioners may have limited knowledge of learning disabilities,¹⁹ and may therefore lack confidence in providing for clients' associated health needs. This may also be true for other generic services. There is a recognition that standard psychiatric services may not always be able to meet the complex needs of people with a learning disability.²⁰ Given the high incidence of associated mental illness within the learning disability population it is worrying that there are, on average, so few sessions, of psychiatric time available to this client group, and that two trusts reported having no psychiatric input to their learning disability teams.

In general there would appear to be a lack of consistency across trusts in the employment of other professional groups with 38% failing to have a specialist dietetic service as part of the learning disability team and 23% failing to have occupational therapy services. In addition, one trust had no physiotherapy sessions committed to the team. This is despite evidence that individuals with a learning disability have increased dietary, nutrition and mobility problems compared with the general population.⁸ As noted above, this may reflect differing needs and priorities of the local population in any given area, a similar mixed professional profile in response to differing local needs has been found for community mental health teams.²¹ It is, however unlikely, given the acknowledged complex needs of people with learning disabilities, that any local population would not have a number of individuals with a learning disability who required additional specialist services. The assumption that such services can be accessed via the general practitioner if they are not available via the community learning disability team may not always be supported.²²

The disparity found between Scottish trusts suggests a lack of equity across these services and points to the need for a national strategy for individuals with a learning disability. The current Learning Disability Review has the remit of producing a framework for services for people with a learning disability. One

question which may need to be addressed is whether the current resources allocated to community learning disability services in Scotland are sufficient. As outlined above the needs of people with a learning disability in relation to challenging behaviour, mental health and general health often exceed those of the general population. In addition there may be an expectation on the part of primary health care services that many of these areas are the responsibility of community learning disability teams.¹⁹ The community learning disability team does have a key role in collaboration with other health and social work professionals in meeting these needs, 'but as is outlined above' may not always have the full range of staff required to do so. The recent Government paper 'Designed to Care'²³ emphasises the role of health boards in needs assessment, service development resource allocation and utilisation, all with the aim of promoting equity.

More fundamental is the question of whether community learning disability teams should continue to exist in their current format. It is likely that there will be an increasing emphasis on the need for joint working across health, social work, housing, education and employment, which is likely to further impact on the nature and remit of community learning disability services. In other countries such as Norway and Sweden, legislation has been introduced which entitles individuals with a learning disability to certain health, education, housing and day care services within the same act.²⁴ In addition, these countries differ from Scottish teams both the way services are organised and in the composition of their teams. Notably in Sweden all staff supporting clients in community homes are required to undertake a three year training. Perhaps related to this is the absence of community learning disability nurses as a profession. It may be that, with the continuing development of, and collaboration between those providing learning disability services in Britain that the composition, role and remit of community learning disability teams will also continue to change.

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